Colour television **Chassis**

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Service Manual

Contents **Page**

1. Technical Specifications, Connections, and Chassis Overview 2
2. Safety Instructions, Warnings, and Notes 5
3. Directions for Use 6
4. Mechanical Instructions 7
5. Service Modes, Error Codes, and Fault Finding 12
6. *Block Diagrams, Testpoint Overviews, and Waveforms*
   Wiring Diagram (32") 23
   Block Diagram Supply (32") 24
   Block Diagram Video 25
   Block Diagram Audio 26
   I2C IC's overview 27
   Supply Lines Overview 28
7. *Circuit Diagrams and PWB Layouts* *Drawing* *PWB*
   LCD Supply Panel: Mains Filter + Standby (A1) 29 31-34
   LCD Supply Panel: Supply (A2) 30 31-34
   Ambi Light (AL) 35 36-34
   SSB: IF, I/O Video Processing (B2) 37 71-82
   SSB: PICNIC (B3A) 38 71-82
   SSB: (FEM) Falconic Embedded Memory (B3B) 39 71-82
   SSB: Eagle (B3C) 40 71-82
   SSB: Columbus (B3D) 41 71-82
   SSB: FBX Supply (B3E) 42 71-82
   SSB: HOP (B4) 43 71-82
   SSB: OTC-Flash (B5A) 44 71-82
   SSB: Backlight Control (B5B) 45 71-82
   SSB: OTC-Flash (B5C) 45 71-82
   SSB: Audio Demodulator (B6A) 46 71-82
   SSB: Dolby Digital Decoder (B6B) 47 71-82
   SSB: Dolby Pro Logic Processor (B6C) 48 71-82
   SSB: Audio Delay (B6D) 49 71-82
   SSB: DC/DC Convertor (B12) 50 71-82
   SSB: Main Tuner (B13A) 51 71-82

Contents **Page**

   SSB: Sub Tuner (B13B) 52 71-82
   SSB: DC/DC Converter (B13C) 53 71-82
   SSB: I/O1: MMC (B14A) 54 71-82
   SSB: I/O2: Connections (B14B) 55 71-82
   SSB: I/O3: Switch (B14C) 56 71-82
   SSB: I/O4: Audio (B14D) 57 71-82
   SSB: I/O: 5 (B14E) 58 71-82
   SSB: I/O6: Digital Input (B14F) 59 71-82
   SSB: I/O: 7 (B14G) 60 71-82
   SSB: PIP HIP (B15A) 61 71-82
   SSB: PIP Switch (B15B) 62 71-82
   SSB: PIP Muppet (B15C) 63 71-82
   SSB: HDI A/D Converter (B19A) 64 71-82
   SSB: EPLD Control (B19B) 65 71-82
   SSB: EPLD OSD (B19C) 66 71-82
   SSB: EPLD I/O (B19D) 67 71-82
   SSB: Backlight Control (B19E) 68 71-82
   SSB: Screen Interface (B20) 69 71-82
   SSB: Connection (B21) 70 71-82
   Side I/O Panel (D) 83 84
   Top Control Panel (E) 85 86
   SCART 3 Panel (H) 87 88
   LED and Switch Panel (J) 89 90
   LCD Standby & Audio Panel: Connections (SA1) 91 94-96
   LCD Standby & Audio Panel: Standby (SA2) 92 94-96
   LCD Standby & Audio Panel: Audio (SA3) 93 94-96
8. Alignments 97
9. Circuit Descriptions, Abbreviation List, and IC Data Sheets 103
10. Spare Parts List 106
11. Revision List 118

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Published by EL 0566 TV Service
Subject to modification EN 3122 785 15490

PHILIPS

1. Technical Specifications, Connections, and Chassis Overview

Index of this chapter:
1.1 Technical Specifications
1.2 Connections
1.3 Chassis Overview

Notes:
- Figures can deviate due to the different set executions.
- Specifications are indicative (subject to change).

1.1 Technical Specifications

1.1.1 Vision

Display type	: LCD, VA
Screen size	: 32" (82 cm), 16:9
Resolution (HxV pixels)	: 1366(*3)x768 WXGA
Contrast ratio	: 800:1 (32-inch)
Light output (cd/m^2)	: 500 (32-inch)
LCD response time (ms)	: 12
Viewing angle (HxV degrees)	: 176 (32-inch)
Tuning system	: PLL
Colour systems	: PAL B/G, D/K, I
	: SECAM B/G, D/K, L/L'
Supported computer formats (60 Hz)	: VGA (640x480)
	: SVGA (800x600)
	: XVGA (1024x768)
	: WXGA (1280x768)
Supported video formats	: 640x480i - 1fH
	: 720x576i - 1fH
	: 640x480p - 2fH
	: 720x576p - 2fH
	: 1920x1080i - 2fH
	: 1920x1152i - 2fH
	: 1280x720p - 3fH
AV (playback only)	: NTSC, PAL, SECAM
Tuner bands	: UHF, VHF, S, Hyper

1.1.2 Sound

Sound systems	: AV stereo,
	: FM/FM B/G
	: NICAM B/G, D/K, I
Maximum power (W_{RMS})	: 2 x 15 (int.)

1.1.3 Miscellaneous

Mains voltage (V_{AC})	: 220 - 240
Mains frequency	: 50 / 60 Hz
Ambient temperature (°C)	: +5 to +40
Maximum humidity (R.H>)	: 90%

Power consumption	
- Normal operation (W)	: 145 (32-inch)
- Stand-by (W)	: < 2

1.2 Connections

Note: The following connector colour abbreviations are used (acc. to DIN/IEC 757): Bk= Black, Bu= Blue, Gn= Green, Gy= Grey, Rd= Red, Wh= White, Ye= Yellow.

1.2.1 Side I/O

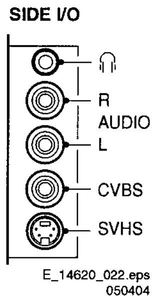

Figure 1-1 Side I/O connections

Headphone (Output)

- Headphone	32 - 600 ohm / 10 mW	🎧

Cinch: Video CVBS - In, Audio - In

Rd - Audio R	0.5 V_{RMS} / 10 kohm	⊕◎
Wh - Audio L	0.5 V_{RMS} / 10 kohm	⊕◎
Ye - Video CVBS	1 V_{PP} / 75 ohm	⊕◎

SVHS (Hosiden): Video Y/C - In

1 - Ground Y	Gnd	⏚
2 - Ground C	Gnd	⏚
3 - Video Y	1 V_{PP} / 75 ohm	⊕
4 - Video C	0.3 V_{PP}P / 75 ohm	⊕

1.2.2 Rear Connections

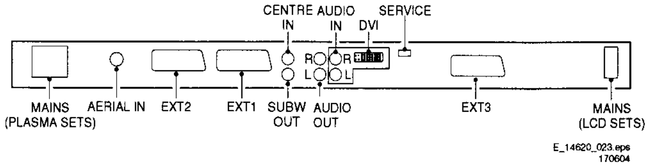

Figure 1-2 Rear connections

Aerial - In

- IEC-type	Coax, 75 ohm	⊤

SCART2: Video RGB/YC - In, CVBS - In/Out, Audio - In/Out

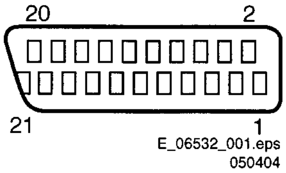

Figure 1-3 SCART connector

1	- Audio R	0.5 V_{RMS} / 1 kohm	○→
2	- Audio R	0.5 V_{RMS} / 10 kohm	→○
3	- Audio L	0.5 V_{RMS} / 1 kohm	○→
4	- Ground Audio	Gnd	⏚
5	- Ground Blue	Gnd	⏚
6	- Audio L	0.5 V_{RMS} / 10 kohm	→○
7	- Video Blue/C-out	0.7 V_{PP} / 75 ohm	→○○→
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Ground Green	Gnd	⏚
10	- Easylink P50	0 - 5 V / 4.7 kohm	→○○→
11	- Video Green	0.7 V_{PP} / 75 ohm	→○
12	- n.c.		
13	- Ground Red	Gnd	⏚
14	- Ground P50	Gnd	⏚
15	- Video Red/C	0.7 V_{PP} / 75 ohm	→○
16	- Status/FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 ohm	→○
17	- Ground Video	Gnd	⏚
18	- Ground FBL	Gnd	⏚
19	- Video CVBS	1 V_{PP} / 75 ohm	○→
20	- Video CVBS/Y	1 V_{PP} / 75 ohm	→○
21	- Shield	Gnd	⏚

SCART1: Video RGB - In, CVBS - In/Out, Audio - In/Out

1	- Audio R	0.5 V_{RMS} / 1 kohm	○→
2	- Audio R	0.5 V_{RMS} / 10 kohm	→○
3	- Audio L	0.5 V_{RMS} / 1 kohm	○→
4	- Ground Audio	Gnd	⏚
5	- Ground Blue	Gnd	⏚
6	- Audio L	0.5 V_{RMS} / 10 kohm	→○
7	- Video Blue	0.7 V_{PP} / 75 ohm	→○○→
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Ground Green	Gnd	⏚
10	- Easylink P50	0 - 5 V / 4.7 kohm	→○○→
11	- Video Green	0.7 V_{PP} / 75 ohm	→○
12	- n.c.		
13	- Ground Red	Gnd	⏚
14	- Ground P50	Gnd	⏚
15	- Video Red	0.7 V_{PP} / 75 ohm	→○
16	- Status/FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 ohm	→○
17	- Ground Video	Gnd	⏚
18	- Ground FBL	Gnd	⏚
19	- Video CVBS	1 V_{PP} / 75 ohm	○→
20	- Video CVBS	1 V_{PP} / 75 ohm	→○
21	- Shield	Gnd	⏚

Cinch: Sub woofer - Out, Centre - In

Bu	- Centre	0.5 V_{RMS} / 10 kohm	→○◎
Bk	- Sub woofer	0.5 V_{RMS} / 10 kohm	○→◎

Cinch: Audio - Out

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	○→◎
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	○→◎

Cinch: DVI Audio - In

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	→○◎
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	→○◎

DVI-I: Digital/Analogue Video - In

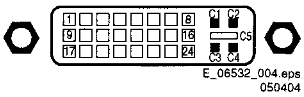

Figure 1-4 DVI-I connector

1	- D2-		→○
2	- D2+		→○
3	- Shield	Gnd	⏚
4	- D4-		→○
5	- D4+		→○
6	- DDC_SCL	DDC clock	○→
7	- DDC_SDA	DDC data	→○○→
8	- V-sync	0 - 5 V	→○
9	- D1-		→○
10	- D1+		→○
11	- Shield	Gnd	⏚
12	- D3-		→○
13	- D3+		→○
14	- +5V		→○
15	- Ground	Gnd	⏚
16	- HPD	Hot Plug Detect	→○
17	- D0-		→○
18	- D0+		→○
19	- Shield	Gnd	⏚
20	- D5-		→○
21	- D5+		→○
22	- Shield	Gnd	⏚
23	- CLK+		→○
24	- CLK-		→○
C1	- Video Red	0.7 V_{PP} / 75 ohm	→○
C2	- Video Green	0.7 V_{PP} / 75 ohm	→○
C3	- Video Blue	0.7 V_{PP} / 75 ohm	→○
C4	- H-sync	0 - 5 V	→○
C5	- Ground	Gnd	⏚

Service connector (ComPair)

1	- SDA-S	I^2C Data (0 - 5 V)	→○○→
2	- SCL-S	I^2C Clock (0 - 5 V)	→○
3	- Ground	Gnd	⏚

SCART3: Video CVBS - In, Audio - In

1	- n.c.		
2	- Audio R	0.5 V_{RMS} / 10 kohm	→○
3	- n.c.		
4	- Ground Audio	Gnd	⏚
5	- Ground Blue	Gnd	⏚
6	- Audio L	0.5 V_{RMS} / 10 kohm	→○
7	- n.c.		
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Ground Green	Gnd	⏚
10	- n.c.		
11	- n.c.		
12	- n.c.		
13	- Ground Red	Gnd	⏚
14	- Ground Data	Gnd	⏚
15	- n.c.		
16	- n.c.		
17	- Ground Video	Gnd	⏚
18	- Ground FBL	Gnd	⏚
19	- n.c.		
20	- Video CVBS	1 V_{PP} / 75 ohm	→○
21	- Shield	Gnd	⏚

1.3 Chassis Overview

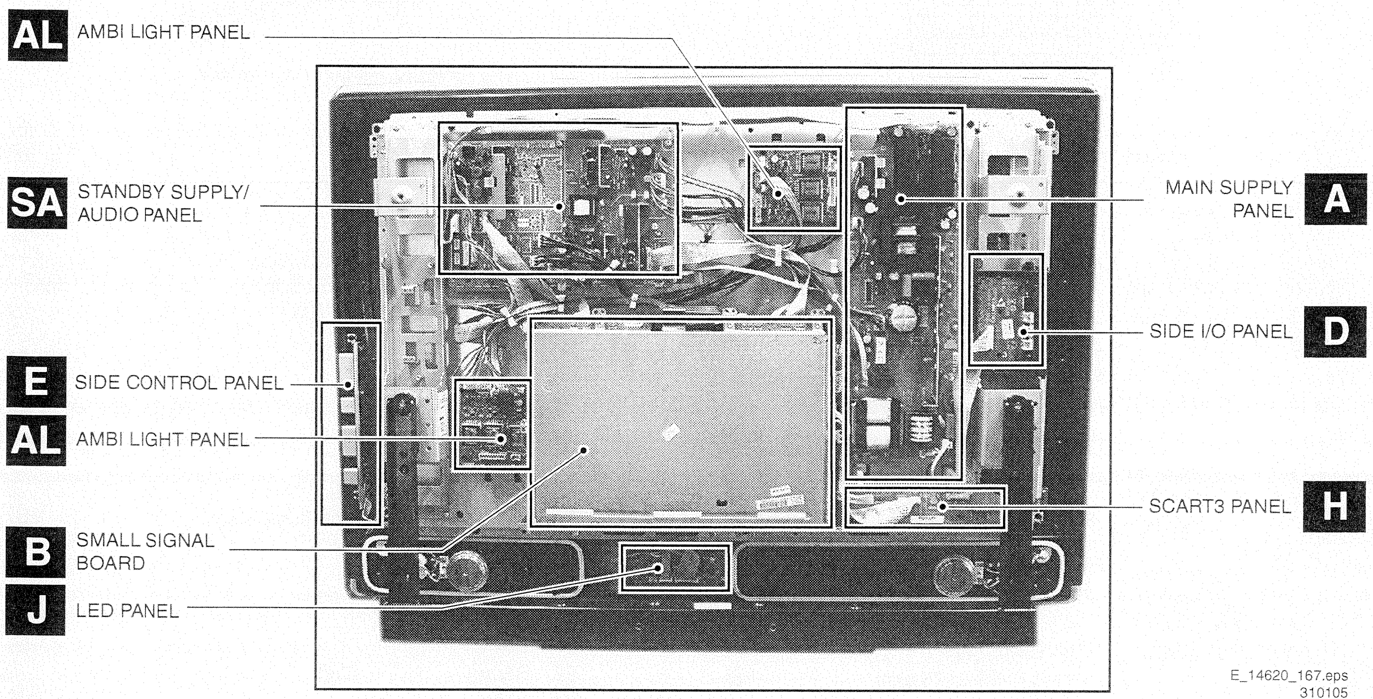
AL AMBI LIGHT PANEL
SA STANDBY SUPPLY/ AUDIO PANEL
E SIDE CONTROL PANEL
AL AMBI LIGHT PANEL
B SMALL SIGNAL BOARD
J LED PANEL
MAIN SUPPLY PANEL A
SIDE I/O PANEL D
SCART3 PANEL H

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Figure 1-5 PWB locations

2. Safety Instructions, Warnings, and Notes

Index of this chapter:

2.1 Safety Instructions
2.2 Warnings
2.3 Notes

2.1 Safety Instructions

Safety regulations require the following **during** a repair:

- Connect the set to the Mains (AC Power) via an isolation transformer (> 800 VA).
- Replace safety components, indicated by the symbol ⚠, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that **after** a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the Mains (AC Power) lead for external damage.
- Check the strain relief of the Mains (AC Power) cord for proper function.
- Check the electrical DC resistance between the Mains (AC Power) plug and the secondary side (only for sets that have a Mains (AC Power) isolated power supply):
  1. Unplug the Mains (AC Power) cord and connect a wire between the two pins of the Mains (AC Power) plug.
  2. Set the Mains (AC Power) switch to the "on" position (keep the Mains (AC Power) cord unplugged!).
  3. Measure the resistance value between the pins of the Mains (AC Power) plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 Mohm and 12 Mohm.
  4. Switch "off" the set, and remove the wire between the two pins of the Mains (AC Power) plug.
- Check the cabinet for defects, to prevent touching of any inner parts by the customer.

2.2 Warnings

- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD ⚠). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this same potential. Available ESD protection equipment:
  - Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
  - Wristband tester 4822 344 13999.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched "on".
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground (⏚), or hot ground (⏚), depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).
- Where necessary, measure the waveforms and voltages with (⊓⊓) and without (⊓̸) aerial signal. Measure the voltages in the power supply section both in normal operation (⏼) and in stand-by (⏻). These values are indicated by means of the appropriate symbols.
- The semiconductors indicated in the circuit diagram and in the parts lists, are interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
- Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic” and the “double-D symbol”, are trademarks of Dolby Laboratories.

2.3.2 Schematic Notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an "E" or an "R" (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are given in micro-farads (μ= $x10^{-6}$), nano-farads (n= $x10^{-9}$), or pico-farads (p= $x10^{-12}$).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An "asterisk" (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

2.3.3 Rework on BGA (Ball Grid Array) ICs

General

Although (LF)BGA assembly yields are very high, there may still be a requirement for component rework. By rework, we mean the process of removing the component from the PWB and replacing it with a new component. If an (LF)BGA is removed from a PWB, the solder balls of the component are deformed drastically so the removed (LF)BGA has to be discarded.

Device Removal

As is the case with any component that, is being removed, it is essential when removing an (LF)BGA, that the board, tracks, solder lands, or surrounding components are not damaged. To remove an (LF)BGA, the board must be uniformly heated to a temperature close to the reflow soldering temperature. A uniform temperature reduces the risk of warping the PWB.
To do this, we recommend that the board is heated until it is certain that all the joints are molten. Then carefully pull the component off the board with a vacuum nozzle. For the appropriate temperature profiles, see the IC data sheet.

Area Preparation

When the component has been removed, the vacant IC area must be cleaned before replacing the (LF)BGA.
Removing an IC often leaves varying amounts of solder on the mounting lands. This excessive solder can be removed with either a solder sucker or solder wick. The remaining flux can be removed with a brush and cleaning agent.
After the board is properly cleaned and inspected, apply flux on the solder lands and on the connection balls of the (LF)BGA.
Note: Do not apply solder paste, as this has been shown to result in problems during re-soldering.

Device Replacement

The last step in the repair process is to solder the new component on the board. Ideally, the (LF)BGA should be aligned under a microscope or magnifying glass. If this is not possible, try to align the (LF)BGA with any board markers. So as not to damage neighbouring components, it may be necessary to reduce some temperatures and times.

More Information

For more information on how to handle BGA devices, visit this URL: *www.atyourservice.ce.philips.com* (needs subscription, not available for all regions). After login, select "Magazine", then go to "Workshop Information". Here you will find Information on how to deal with BGA-ICs.

2.3.4 Lead-free Solder

Philips CE is producing lead-free sets (PBF) from 1.1.2005 onwards.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 5 and 6 refer to the production year, digits 7 and 8 refer to production week (in example below it is 1991 week 18).

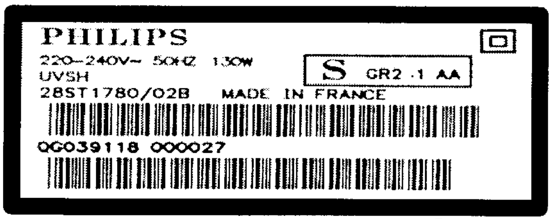

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Figure 2-1 Serial number example

Regardless of the special lead-free logo (which is not always indicated), one must treat all sets from this date onwards according to the rules as described below.

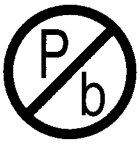

Figure 2-2 Lead-free logo

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
  - To reach a solder-tip temperature of at least 400°C.
  - To stabilise the adjusted temperature at the solder-tip.
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360°C - 380°C is reached and stabilised at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch "off" unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly **to avoid** mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.
- Use only original spare-parts listed in the Service-Manuals. Not listed standard material (commodities) has to be purchased at external companies.
- Special information for lead-free BGA ICs: these ICs will be delivered in so-called "dry-packaging" to protect the IC against moisture. This packaging may only be opened shortly before it is used (soldered). Otherwise the body of the IC gets "wet" inside and during the heating time the structure of the IC will be destroyed due to high (steam-) pressure inside the body. If the packaging was opened before usage, the IC has to be heated up for some hours (around 90°C) for drying (think of ESD-protection!).
  Do not re-use BGAs at all!
- For sets produced before 1.1.2005, containing leaded soldering tin and components, all needed spare parts will be available till the end of the service period. For the repair of such sets nothing changes.

In case of doubt whether the board is lead-free or not (or with mixed technologies), you can use the following method:

- Always use the highest temperature to solder, when using SAC305 (see also instructions below).
- De-solder thoroughly (clean solder joints to avoid the mixing of two alloys).

Caution: For BGA-ICs, you **must** use the correct temperature profile, which is coupled to the 12NC. For an overview of these profiles, visit the website *www.atyourservice.ce.philips.com* (needs subscription, but is not available for all regions).
You will find this and more technical information within the "Magazine", chapter "Workshop information".
For additional questions please contact your local repair help desk.

2.3.5 Practical Service Precautions

- **It makes sense to avoid exposure to electrical shock.** While some sources are expected to have a possible dangerous impact, others of quite high potential are of limited current and are sometimes held in less regard.
- **Always respect voltages.** While some may not be dangerous in themselves, they can cause unexpected reactions that are best avoided. Before reaching into a powered TV set, it is best to test the high voltage insulation. It is easy to do, and is a good service precaution.

3. Directions for Use

You can download this information from the following websites:
http://www.philips.com/support
http://www.p4c.philips.com

4. Mechanical Instructions

Index of this chapter:

4.1 Cable Dressing
4.2 Service Position
4.3 Assy/PWB Removal
4.4 Display (Dis)Assembly
4.5 Set Re-assembly

Notes:

- Figures below can deviate slightly from the actual situation, due to the different set executions.
- Follow the disassemble instructions in described order.

4.1 Cable Dressing

4.1.1 Chassis

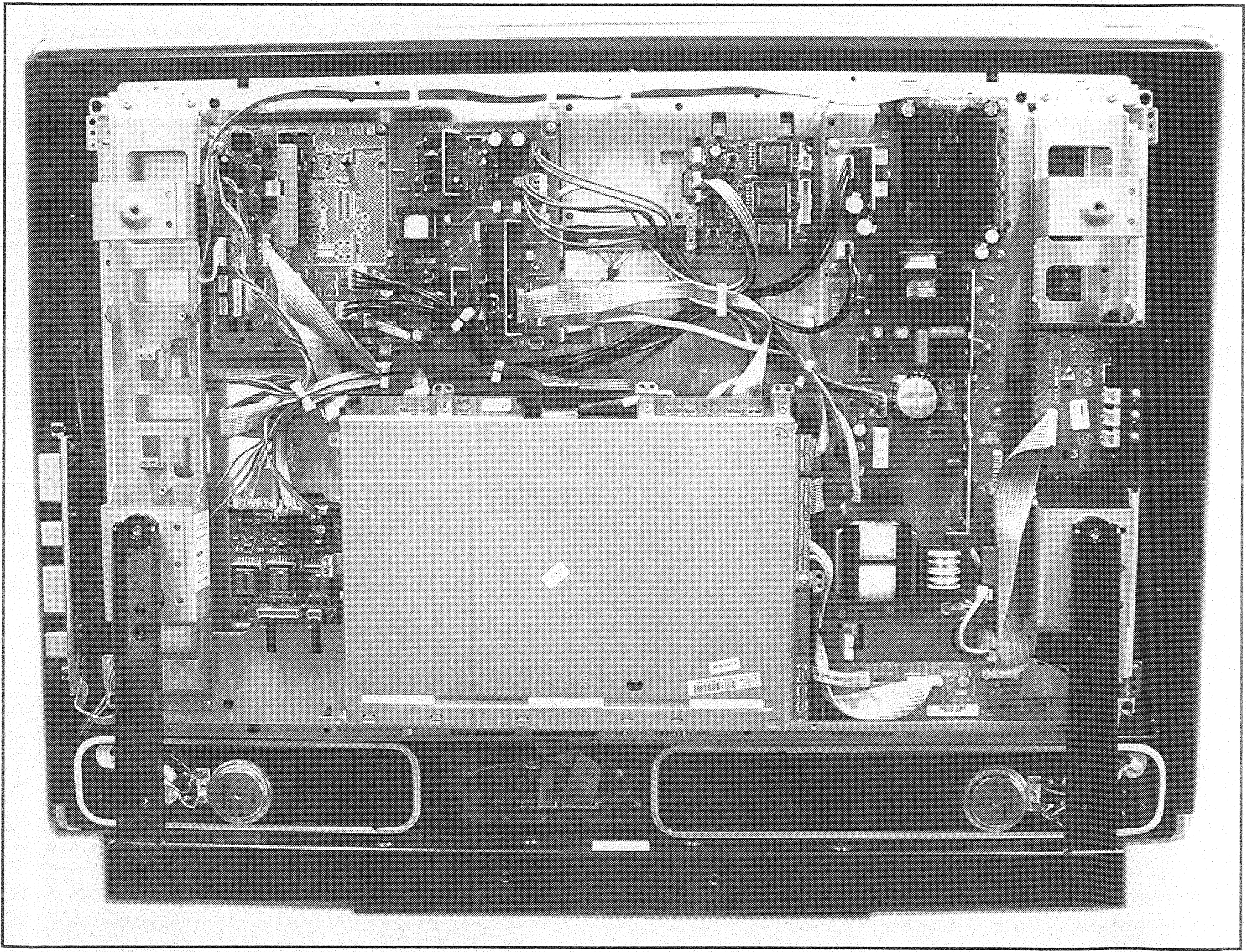

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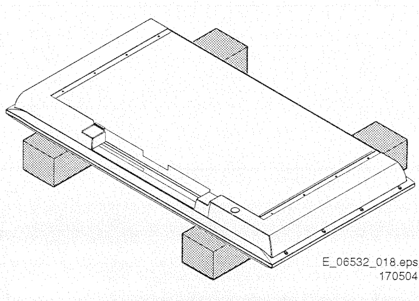
Figure 4-1 Chassis cable dressing

4.2 Service Position

For easy servicing of this set, there are a few possibilities created:

- The buffers from the packaging.
- Foam bars (created for Service).
- Aluminium service stands (created for Service).

4.2.1 Foam Bars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170504

Figure 4-2 Foam bars

The foam bars (order code 3122 785 90580 for two pieces) can be used for all types and sizes of Flat TVs. By laying the TV face down on the (ESD protective) foam bars, a stable situation is created to perform measurements and alignments.
By placing a mirror under the TV, you can monitor the screen.

4.2.2 Aluminium Stands

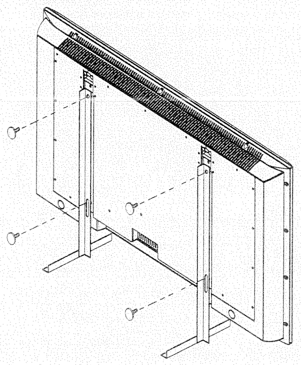
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Figure 4-3 Aluminium stands (Mk1)

The new (Mk2) aluminium stands (order code 3122 785 90690) can also be used to do measurements, alignments, and duration tests. The stands can be (dis)mounted quick and easy by means of sliding them in/out the "mushrooms".
Important: For (older) FTV sets without these "mushrooms", it is obligatory to use the provided screws, otherwise it is possible to damage the monitor inside!.

4.3 Assy/PWB Removal

4.3.1 Metal Back Plate

Caution: Disconnect the mains power cord before you remove the metal back plate.

1. Place the TV set upside down on a table top, using the foam bars (see part "Foam Bars").
   Caution: do **not** put pressure on the display, but let the monitor lean on the speakers or the Front cover.
2. Remove all T10 parker screws [1] from the top, left, and right sides of the metal back plate.
3. Remove all T10 tapping screws [2] from the centre and bottom of the metal back plate.
4. Lift the back plate from the TV. Make sure that wires and flat foils are not damaged during the removal.

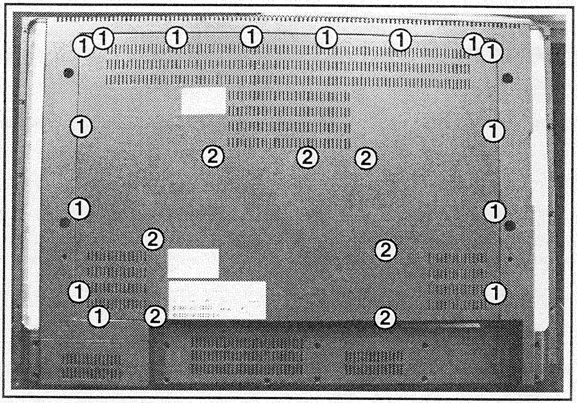

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Figure 4-4 Metal back plate

4.3.2 Rear Cover

1. Disconnect all connectors [1] at both AmbiLight Inverters.
2. Remove all T10 parker screws [2] around the edges of the rear cover.
3. Remove the four "mushrooms" [3] from the back plate.
4. Lift the rear cover from the TV.

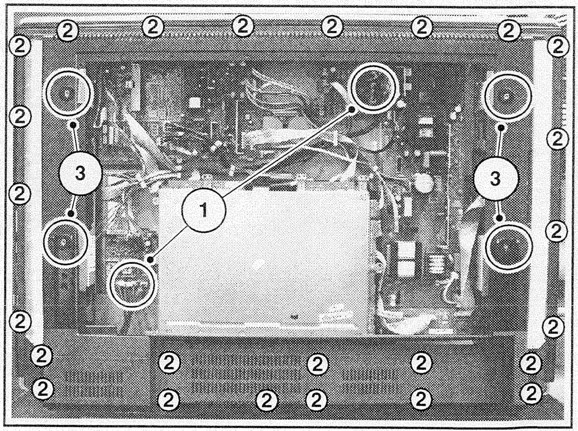

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Figure 4-5 Rear cover

4.3.3 LCD Supply Panel

1. Disconnect all cables from the LCD supply panel.
2. Remove all mounting screws from the LCD supply panel.
3. Take out the panel.

4.3.4 AmbiLight Inverter Panel

These models are equipped with **two** AmbiLight Inverters.

1. Disconnect all cables from the AmbiLight Inverter panel.
2. Remove all mounting screws [1] from the AmbiLight Inverter panel.
3. Take out the panel.

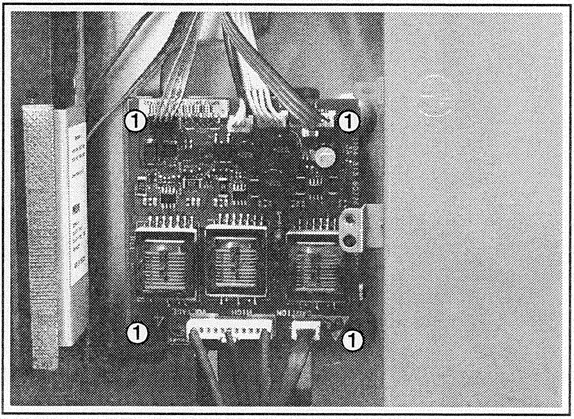

Figure 4-6 AmbiLight inverter (left lower side)

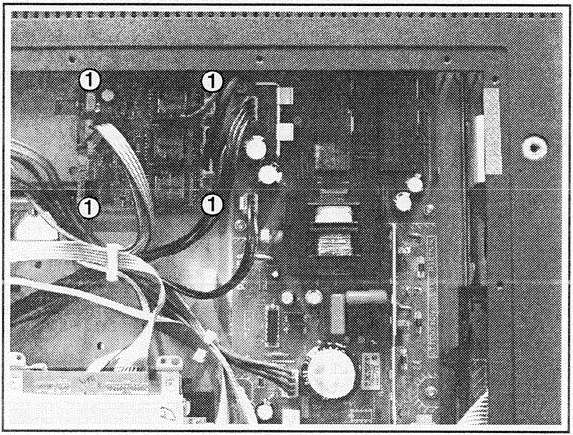

Figure 4-7 AmbiLight inverter (right upper side)

4.3.5 3th SCART Panel

1. Disconnect all cables from the 3th SCART panel.
2. Remove the two mounting screws near the SCART connector at the connector plate (see [7] in figure “Connector plate” further on).
3. Take out the panel.

4.3.6 Stand-by Supply/Audio Panel

1. Disconnect all cables from the Stand-by Supply/Audio panel.
2. Remove all T10 mounting screws at the top of the Stand-by Supply/Audio panel.
3. Take out the panel (it hinges at the bottom side).

4.3.7 Side I/O Panel

1. Disconnect the cable [1] from the Side I/O panel.
2. Remove the assy mounting screws [2].
3. Take out the assy.
4. Release the clamps [3] and take out the panel.

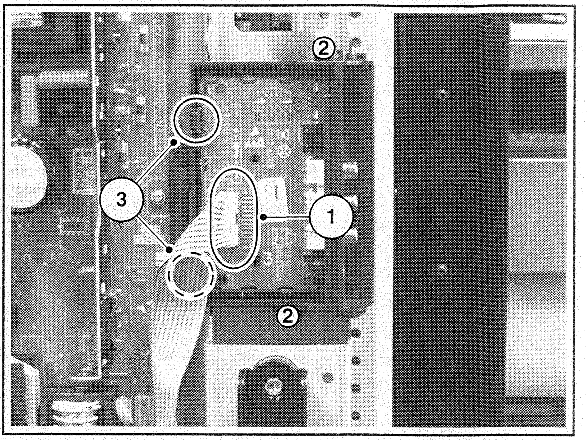

Figure 4-8 Side I/O panel

4.3.8 (Top) Control Panel

1. Remove the glued foam block [1].
2. Remove the assy mounting screws [2].
3. Take out the assy.
4. Release the clamps and take out the panel.

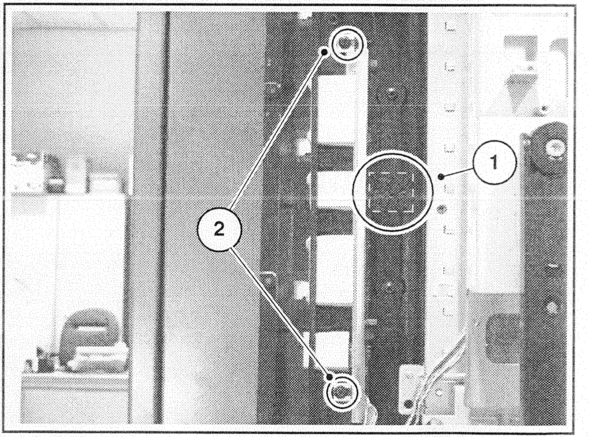

Figure 4-9 Local keyboard

4.3.9 LED Panel

1. Disconnect all cables from the LED panel.
2. Remove the mounting screws from the LED panel.
3. Take out the panel.

4.3.10 Speakers

1. After removal of the cover plate, you can access the speakers.
2. Be sure that the foam that makes the unit airtight is not damaged. Otherwise replace it.

4.3.11 SSB

1. Remove the LVDS connector locking bracket [1][2].
2. Remove all shielding fixing screws.
3. Slide, and lift the shielding at the top [3]. The panel hinges at the SCART side. At the same time, use a screwdriver to carefully prize the shielding at the bottom side [4], and remove the shielding. The SSB is now accessible.
4. To remove the whole SSB, unscrew all connector fixing screws from the connector plate [5][6]. Use a 5 mm socket screwdriver to remove both DVI connector distance bolts [6].
5. Disconnect the LVDS cable, and all other cables.
6. Remove the mounting screw [8] from the SSB.
7. Bend the brackets [9] away (may require some force), lift the SSB, and take it out.

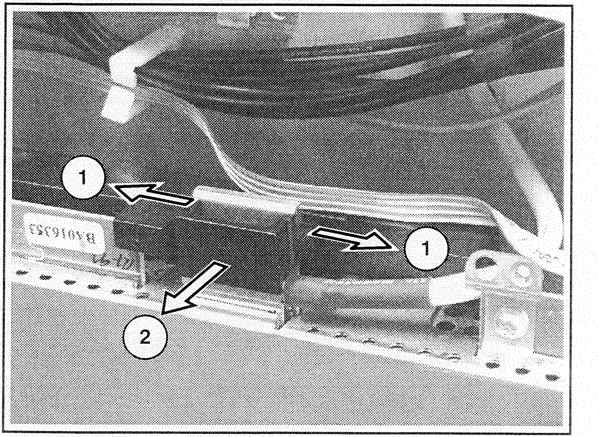

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Figure 4-10 LVDS connector locking bracket

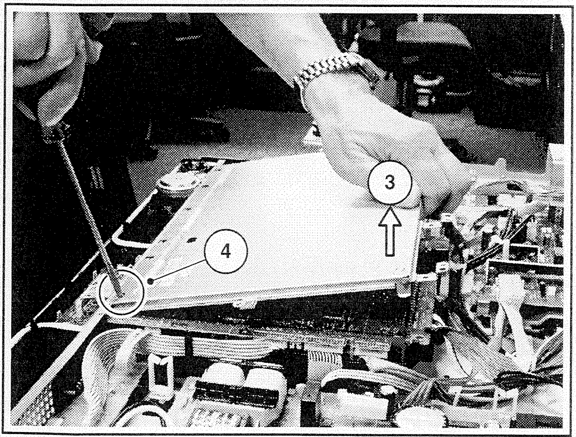

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Figure 4-11 SSB top shielding

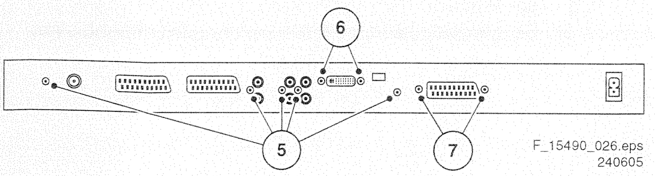

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Figure 4-12 Connector plate

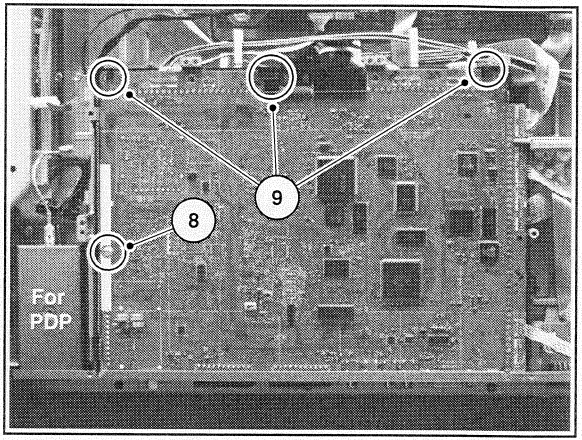

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Figure 4-13 SSB brackets

4.3.12 AmbiLight Lamp Unit

The AmbiLight lamp units are located in the TV's rear cover.

1. Remove the cable clamps.
2. Remove all mounting AmbiLight screws.
3. Slide the AmbiLight unit to the side and take out the unit.

4.4 Display (Dis)Assembly

Important: Be sure to work in a dust free environment during the following activities. In addition, the use of (fabric) hand gloves is advised.

1. **Important:** Unplug the cables [1][2] at the LCD panel. **Be careful**, as the LVDS connector [1] is very fragile!
2. Unplug the backlight and loudspeaker connectors [3][4].
3. Remove all T10 screws [5] from the mounting frame.
4. Remove all mounting LCD panel screws [6]. One of them [7] is somewhat hidden underneath the SCART panel. The best way to remove this screw is to loosen the 3th SCART panel first via the 2 screws at the SCART connector (see [7] in figure "Connector plate" earlier).
5. Lift the metal frame (together with all PWBs) from the LCD panel. During lift, free the backlight and speaker cables.
6. After removal of the frame, you can lift the LCD display from the set.

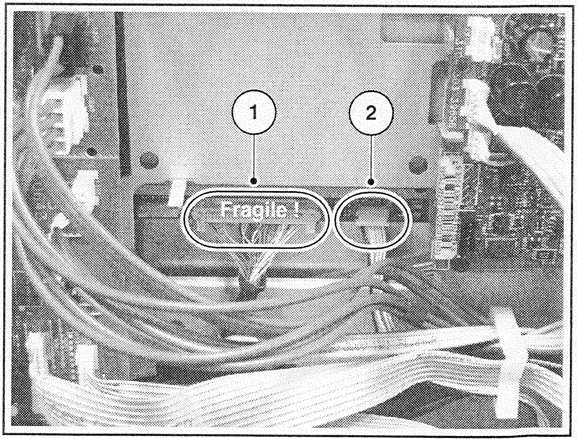

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Figure 4-14 LCD panel connectors

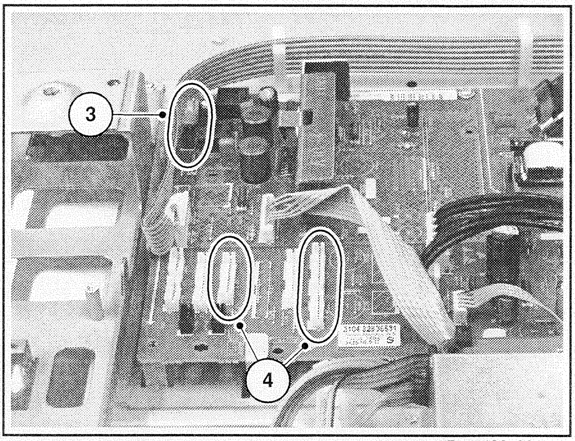

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Figure 4-15 Speaker and LCD backlight cables

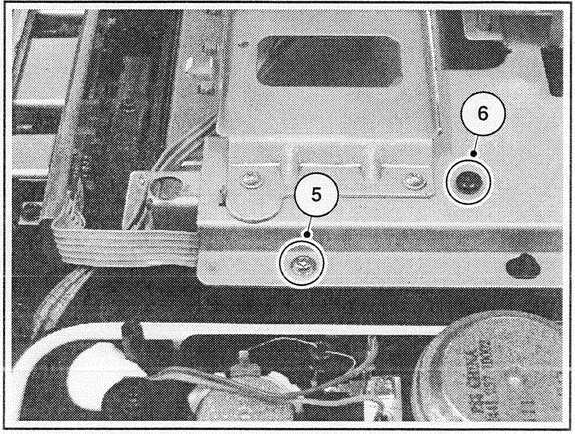

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Figure 4-16 LCD panel disassembly (part 1)

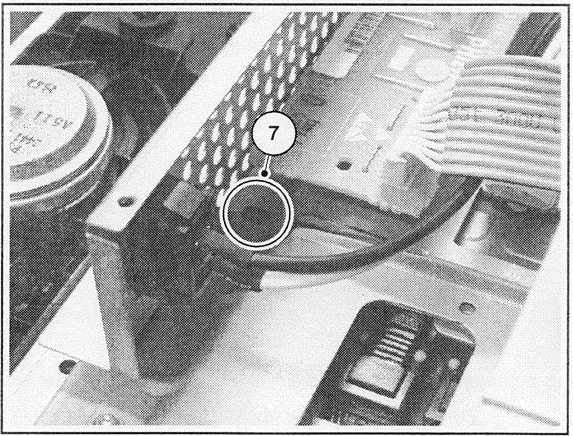

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Figure 4-17 LCD panel disassembly (part 2)

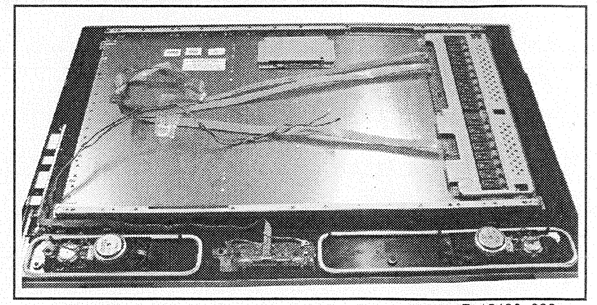

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Figure 4-18 Bare LCD panel after frame removal

4.5 Set Re-assembly

To re-assemble the whole set, execute all processes in reverse order.

Note: While re-assembling the TV, make sure that:

- All cables are placed and connected in their original position (see figure “Chassis cable dressing” in the beginning of this chapter and/or the “Wiring Diagram” in chapter 6).
- LVDS connector (SSB) is secured with plastic clamp.
- The "grounding" wire between metal speaker grid and frame [1] is reconnected.

–

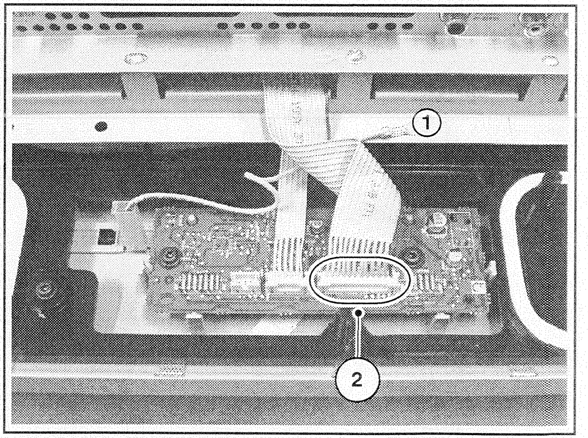

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Figure 4-19 Metal speaker grid grounding wire

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

5.1 Test Points
5.2 Service Modes
5.3 Problems and Solving Tips (related to CSM)
5.4 Service Tools
5.5 Error Codes
5.6 The Blinking LED Procedure
5.7 Protections
5.8 Repair tips
5.9 Software Downloading

5.1 Test Points

The chassis is equipped with test points printed on the circuit board assemblies.

Perform measurements under the following conditions:

- Service Default Mode.
- Video: colour bar signal.
- Audio: 3 kHz left, 1 kHz right.

5.2 Service Modes

Service Default Mode (SDM) and Service Alignment Mode (SAM) offer several features for the service technician, while the Customer Service Mode (CSM) is used for communication between a Philips Customer Care Centre (P3C) and a customer.

There is also the option of using ComPair, a hardware interface between a computer (see requirements below) and the TV chassis. It offers the ability of structured troubleshooting, test pattern generation, error code reading, software version read-out, and software upgrading.
Minimum requirements: a Pentium processor, Windows 95/98, and a CD-ROM drive (see also paragraph "ComPair").

Remark: The silk screen printing is not correct for the SAM/SDM indication. For the correct location of these pins, see figure "Service pads".

5.2.1 Service Default Mode (SDM)

Purpose

- To create a pre-defined setting, to get the same measurement results as given in this manual.
- To override SW protections.
- To start the blinking LED procedure.

Specifications

Table 5-1 SDM default settings

Region	Freq. (MHz)	Default system
Europe, AP-PAL/Multi	475.25	PAL B/G
NAFTA, AP-NTSC, LATAM	61.25 (ch. 3)	NTSC M

- All picture settings at 50% (brightness, colour, contrast).
- All sound settings at 50%, except volume at 25%.
- All service-unfriendly modes (if present) are disabled, like:
  - (Sleep) timer.
  - Child/parental lock.
  - Blue mute.
  - Automatic volume limiter (AVL).
  - Auto switch-off (when no video signal was received for 10 minutes).
  - Skip/blank of non-favourite pre-sets.
  - Smart modes.
  - Auto store of personal presets.
  - Auto user menu time-out.

How to activate SDM

Use one of the following methods:

- Use the standard RC-transmitter and key in the code **"062596"**, directly followed by the "MENU" button.
  Note: It is possible that, together with the SDM, the main menu will appear. To switch it off, push the "MENU" button again.

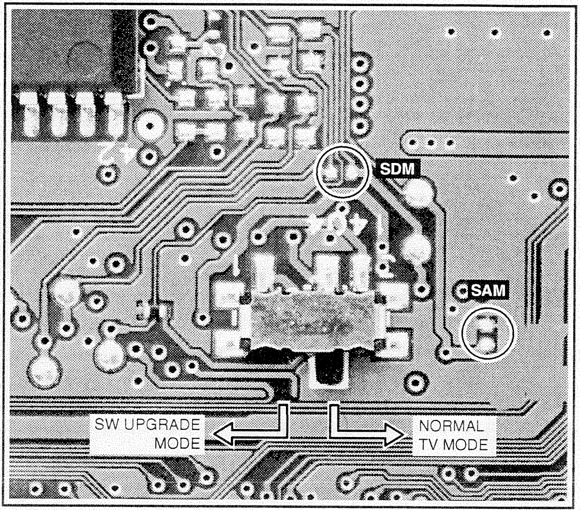

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Figure 5-1 Service pads

- Short for a moment the two solder pads on the SSB, with the indication "SDM" (see figure "Service pads"). Activation can be performed in all modes, except when the TV has a problem with the main microprocessor.
  Caution: If the SDM is activated via the pins, all the software-controlled protections are de-activated.
- Use the DST-emulation feature of ComPair.
- Use the "DEFAULT" button on the Dealer Service Tool (RC7150).

How to navigate

When you press the "MENU" button on the RC transmitter, the TV will toggle between the SDM and the normal user menu (with the SDM mode still active in the background).

How to exit SDM

Use one of the following methods:

- Switch the TV to STANDBY via the RC-transmitter.
- Press the "EXIT" button on the DST.
- Via a standard customer RC-transmitter: key in "00"-sequence.

5.2.2 Service Alignment Mode (SAM)

Purpose

- To perform (software) alignments.
- To change option settings.
- To easily identify the used software version.
- To view operation hours.
- To display (or clear) the error code buffer.

Specifications

- Operation hours counter.
- Software version.

- Option settings.
- Error buffer reading and erasing.
- Software alignments.

How to activate SAM

Use one of the following methods:

- Via a standard RC transmitter: key in the code **"062596"** directly followed by the "OSD [i+]" button. After activating SAM with this method a service warning will appear on the screen, you can continue by pressing any digit key on the RC.
- Short for a moment the two solder pads on the SSB with the indication "SAM" (see figure "Service pads"). Depending on the software version, it is possible that a service warning will appear. You can continue by pressing any digit key on the RC.
- Use the DST-emulation feature of ComPair.
- Press the ALIGN button on the DST while the TV is in the normal operation

After activating this mode, "SAM" will appear in the upper right corner of the screen.

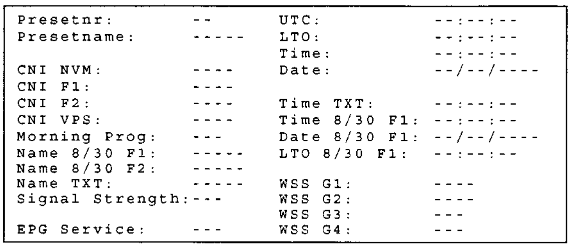
Contents of SAM:

- **Operation Hours.** Displays the accumulated total of operation hours (not the stand-by hours).
- **Hardware Info.**
  - **ROM Version.** Displays the date of the software and the software version of the ROM
    Ex.: TX24EU_1.0_01234 = AAAABB_X.Y_NNNNN.
    - **AAAA**= the chassis name.
    - **BB**= the region: EU= Europe, AP= Asia Pacific PAL/Multi, AN= Asia Pacific NTSC, US= USA, LT= LATAM.
    - **X.Y**= the software version, where X is the main version number (different numbers are not compatible with one another) and Y is the sub version number (a higher number is always compatible with a lower number).
    - **NNNNN**= last five digits of 12nc code software.
  - **FBX Version.** Displays the software version of the FBX
  - **SW VERSION EPLD.** Displays the software version of the EPLD.
- **Errors.** (followed by maximal 10 errors). The most recent error is displayed at the upper left (for an error explanation see paragraph "Error Codes").
- **Defective Module.** Here the module that generates the error is displayed. If there are multiple errors in the buffer, which are not all generated by a single module, there is probably another defect. It will then display the message "UNKNOWN" here.
- **Reset Error Buffer.** When you press the "OK" button, the error buffer is reset.
- **Alignments.** This will activate the "ALIGNMENTS" sub-menu.
- **Dealer Options.** Extra features for the dealers.
- **Service Options.** Extra features for Service.
- **Initialise NVM.** The moment the processor recognises a corrupted NVM, the "initialise NVM" line will be highlighted. Now, you can do two things (dependent of the service instructions at that moment):
  - Save the content of the NVM via ComPair for development analysis, **before** initialising. This will give the Philips Service department an extra possibility for diagnosis (e.g. when Development asks for this).
  - Initialise the NVM (same as in the past, however now it happens conscious).

Note: When you have a corrupted NVM, or you have replaced the NVM, there is a high possibility that you will not have picture any more because your display option is not correct. So, before you can initialize your NVM via the SAM, you need to have a picture and therefore you need the correct display option. This code can be found on the option code sticker inside the set.

- **Store.** All options and alignments are stored when pressing the "OK"-button
- **Functional Test.** All devices are tested via the "OK" button. Eventual errors are displayed in the error buffer. The error buffer is not erased, the content returns when this test is terminated.
- **Daily Menus.** With the "OK" button, you can go to the normal user menu. SAM is still active in the background. With the "MENU" button, you return from the user menu to SAM menu. This feature can be helpful to quickly change some settings in the user menu.
- **SW Maintenance.**
  - **Upgrade.** More info see paragraph Software downloading.
  - **Events.** Not useful for service purposes. In case of specific software problems, the development department can ask for this info.
  - **BDM Info.** Broadcast Debug Menu info. The purpose of this menu is to debug the broadcast, **not** the TV. The menu gives an overview of what is received on the current preset.

Following items are displayed:



```
Presetnr:          --        UTC:            --:--:--
Presetname:        -----     LTO:            --:--:--
                             Time:           --:--:--
CNI NVM:           ----      Date:           --/--/----
CNI F1:            ----
CNI F2:            ----      Time TXT:       --:--:--
CNI VPS:           ----      Time 8/30 F1:   --:--:--
Morning Prog:      ---       Date 8/30 F1:   --/--/----
Name 8/30 F1:      -----     LTO 8/30 F1:    --:--:--
Name 8/30 F2:      -----
Name TXT:          -----     WSS G1:         ----
Signal Strength:---          WSS G2:         ----
                             WSS G3:         ---
EPG Service:       ---       WSS G4:         ---
```

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Figure 5-2 Broadcast debug menu overview

Table 5-2 Broadcast debug menu explanation

Item	Source	Description
Presetnr	Set	Preset number of the current selected preset.
Presetname	Set	Preset name of the current selected preset.
CNI NVM	Broadcaster	CNI number stored in NVM for the current preset.
CNI F1	Broadcaster	CNI number from transmitted Packet 8/30 Format 1.
CNI F2	Broadcaster	CNI number from transmitted Packet 8/30 Format 2.
CNI VPS	Broadcaster	CNI number from transmitted VPS line.
Morning Prog	Broadcaster	"ARD" or "ZDF" according to dedicated bit in 8/30 Format 1.
Name 8/30 F1	Broadcaster	Name extracted from status message of 8/30 Format 1.
Name 8/30 F2	Broadcaster	Name extracted from status message of 8/30 Format 2.
Name TXT	Broadcaster	Name extracted from TXT header.
Signal Strength	FBX	Noise figure measured for selected preset.
EPG Service	Set	EPG Service stored in NVM for current preset displayed as "TXT", "MCP", "SCP", "OCP".
UTC	Set	UTC (Universal Time Code formerly known as Greenwich Mean Time) used in the TV.
LTO	Set	LTO (Local Time Offset) used in the TV. Used by EPG for all NextView displays. (= Time TXT header - Time 8/30 F1)
Time	Set	Current time running in the TV. Was extracted at start-up, then maintained by software.
Date	Set	Current date running in the TV. Was extracted at start-up, then maintained by software.
Time TXT	Broadcaster	TXT header time from the selected preset.
Time 8/30 F1	Broadcaster	UTC time from 8/30 Format 1.
Date 8/30 F1	Broadcaster	Date from 8/30 Format 1.
LTO 8/30 F1	Broadcaster	LTO from 8/30 Format 1.
WSS G1	Broadcaster	WSS Group 1 (Aspect Ratio) bits 0 1 2 3
WSS G2	Broadcaster	WSS Group 2 (Enhanced Services) bits 4 5 6 7
WSS G3	Broadcaster	WSS Group 3 (Subtitles) bits 8 9 10
WSS G4	Broadcaster	WSS Group 4 (Reserved) bits 11 12 13

How to navigate

- In SAM, you can select the menu items with the "CURSOR UP/DOWN" key on the RC-transmitter. The selected item will be highlighted. When not all menu items fit on the screen, move the "CURSOR UP/DOWN" key to display the next/previous menu items.
- With the "CURSOR LEFT/RIGHT" keys, it is possible to:
  - (De) activate the selected menu item.
  - Change the value of the selected menu item.
  - Activate the selected sub-menu.

How to exit SAM

Use one of the following methods:

- Press the "MENU" button on the RC-transmitter, or
- Switch the TV to STANDBY via the RC-transmitter, or
- Press the "EXIT" button on the DST.

5.2.3 Customer Service Mode (CSM)

Purpose

When a customer is having problems with his TV-set, he can call his dealer. The service technician can than ask the customer to activate the CSM, in order to identify the status of the TV. Now, the service technician can judge the severity of the complaint. In many cases, he can advise the customer how to solve the problem, or he can decide if it is necessary to visit the customer.
The CSM is a read only mode; therefore, modifications in this mode are not possible.

How to activate CSM

Use the following method:
Key in the code **"123654"** via the standard RC transmitter.

Note: Activation of the CSM is only possible if there is no (user) menu on the screen!

How to navigate

By means of the "CURSOR-DOWN/UP" knob on the RC-transmitter, you can navigate through the menus.

Contents of CSM

CUSTOMER SERVICE MENU 1

- **Software Version (example: TX24EU_1.0_01234).** Displays the built-in software version. In case of field problems related to software, software can be upgraded (for more details, see paragraph Software downloading). You will find details of the software versions in the chapter "Software Survey" of the "Product Survey - Colour Television" publication. This publication is generated four times a year.
- **Feature Box**. The 12NC-number of the built-in Feature Box software.
- **Set Type.** This information is very helpful for a help desk/ workshop as reference for further diagnosis. In this way, it is not necessary for the customer to look at the rear of the TV-set.
- **Code 1.** Gives the latest five errors of the error buffer. As soon as the built-in diagnose software has detected an error the buffer is adapted. The last occurred error is displayed on the left most position. Each error code is displayed as a 3-digit number. When less than 10 errors occur, the rest of the buffer is empty (000). See also paragraph Error Codes for a description.
- **Code 2.** Gives the first five errors of the error buffer. See also paragraph Error Codes for a description.
- **Volume.** Gives the last status of the volume as set by the customer. The value can vary from 0 (volume is minimum) to 100 (volume is maximum). Volume values can be changed via the volume key on the RC-transmitter.
- **Brightness.** Gives the last status of the brightness as set by the customer. The value can vary from 0 (brightness is minimum) to 100 (brightness is maximum). Brightness values can be changed via the "CURSOR LEFT" and "CURSOR RIGHT" keys on the RC-transmitter after pressing the "MENU" button and selecting "PICTURE" and "BRIGHTNESS".
- **Contrast.** Gives the last status of the contrast as set by the customer. The value can vary from 0 (contrast is minimum) to 100 (contrast is maximum). Contrast values can be changed via "CURSOR LEFT" and "CURSOR RIGHT" keys on the RC-transmitter after pressing the "MENU" button and selecting "PICTURE" and "CONTRAST".
- **Colour.** Gives the last status of the colour saturation, as set by the customer. The value can vary from 0 (colour is minimum) to 100 (colour is maximum). Colour values can be changed via "CURSOR LEFT" and "CURSOR RIGHT" keys on the RC-transmitter after pressing the "MENU" button and selecting "PICTURE" and "COLOUR".
- **Hue.** Only relevant for NTSC-signals (e.g. some NTSC-DVD-discs).

CUSTOMER SERVICE MENU 2

- **Sharpness.** Gives the sharpness value. The value can vary from 0 (sharpness is minimum) to 7 (sharpness is maximum). In case of bad antenna signals, a too high value of the sharpness can result in a noisy picture. Sharpness values can be changed via the "CURSOR LEFT" and "CURSOR RIGHT" keys on the RC-transmitter after pressing the "MENU" button and selecting "PICTURE" and "SHARPNESS".
- **Headphone Volume.** Gives the last status of the head phone volume, as set by the customer. The value can vary from 0 (volume is minimum) to 100 (volume is maximum). Head phone volume values can be changed via the "CURSOR LEFT" and "CURSOR RIGHT" keys on the RC-transmitter after pressing the "MENU" button and selecting "SOUND" and "HEADPHONE VOLUME".
- **Dolby.** Indicates whether the received transmitter transmits Dolby sound ("ON") or not ("OFF"). Attention: The presence of Dolby can only be tested by the software on the Dolby Signalling bit. If a Dolby transmission is received without a Dolby Signalling bit, this indicator will show "OFF" even though a Dolby transmission is received.
- **Surround Mode.** Indicates the by the customer selected surround mode (or automatically chosen mode). Possible values are "OFF", "INCREDIBLE SURROUND" OR "DOLBY VIRTUAL". These settings can be influenced after pressing the "MENU" button and selecting "SOUND" and SURROUND MODE". It can also have been selected automatically by signalling bits (internal software).
- **Tuner Frequency.** Indicates the frequency the selected transmitter is tuned to. The tuner frequency can be changed via the "CURSOR LEFT" and "CURSOR RIGHT" keys for fine tune after opening the installation menu and selecting "INSTALL" and "MANUAL INSTALL".
- **Digital Option.** Gives the selected digital mode, "PROGRESSIVE SCAN", "MOVIE PLUS" or "PIXEL PLUS". Change via "MENU", "PICTURE", "DIGITAL OPTIONS".
- **Centre Trim.** Not applicable for this set.
- **TV System.** Gives information about the video system of the selected transmitter.
  - BG: PAL BG signal received.
  - DK: PAL DK signal received.
  - I: PAL I signal received.
  - L/La: SECAM L/La signals received.
  - M: NTSC M signal received with video carrier on 38.9 MHz.

CUSTOMER SERVICE MENU 3

- **Balance.** Indicates the balance settings, between "-50" and "+50". Change via "MENU", "SOUND", and "BALANCE". Not applicable for Dolby Pro Logic sets.
- **Centre Mode.** Not applicable for this TV.

- **DNR.** Gives the selected DNR setting (Dynamic Noise Reduction), "OFF", "MINIMUM", "MEDIUM", or "MAXIMUM". Change via "MENU", "PICTURE", "DNR"
- **Noise Figure.** Gives the noise ratio for the selected transmitter. This value can vary from 0 (good signal) to 127 (average signal) and to 255 (bad signal). For some software versions, the noise figure will only be valid when "Active Control" is set to "medium" or "maximum".
- **Source.** Indicates which source is used and the video/ audio signal quality of the selected source.
  Example: Tuner, Video/NICAM) Source: "TUNER", "EXT1", "EXT2", "EXT3", "EXT4", "SIDE", "AV1", "AV2", "AV3" or "AV4". Video signal quality: "VIDEO", "S-VIDEO", "RGB 1FH", "YPBPR 1FH 480P", "YPBPR 1FH 576P", "YPBPR 1FH 1080I", "YPBPR 2FH 480P", "YPBPR 2FH 576P", "YPBPR 2FH 1080I", "RGB 2FH 480P", "RGB 2FH 576P" or "RGB 2FH 1080I". Audio signal quality: "STEREO", "SPDIF 1", "SPDIF 2", or "SPDIF".
- **Audio System.** Gives information about the audio system of the selected transmitter: "ANALOGUE MONO", "ANALOGUE STEREO", "PCM 2/0", "DD 1/0", "DD 2/0 LtRt", "DD 2/0 LORO", "DD 2/1", "DD 2/2", "DD 3/0", "DD 3/ 1", "DD 3/2", "DD 1+1", "MPEG 1/0", "MPEG 2/0", "MPEG 2/0 LtRt", "MPEG 2/1", "MPEG 2/2", "MPEG 3/0", "MPEG 3/1", "MPEG 3/2", "MPEG 1+1" or "MPEG 2+2".
- **Tuned Bit.** Gives information about the tuning method of the stored pre-set. If a channel is found via "automatic installation", you will see the value "YES". When you change this (automatically found) frequency via "fine tune" adjustment (installation menu - manual installation), the displayed value will change to "NO". Therefore, when you see the value "NO" in this line, it is an indication that the received channel is a non-standard signal (e.g. of a VCR).
- **Surround Speakers.** Not applicable in this set.
- **On Timer.** Indicates if the "On Timer" is set "ON" or "OFF" and if the timer is "ON" also displays start time, start day and program number. Change via "MENU", "TV", "FEATURES", and "ON TIMER".
- **Preset Lock.** Indicates if the selected preset has a child lock: "LOCKED" or "UNLOCKED". Change via "MENU", "TV", "FEATURES", "CHILD LOCK", and "CUSTOM LOCK".

CUSTOMER SERVICE MENU 4

- **Child Lock.** Indicates the last status of the general child lock: "UNLOCK", "LOCK", or "CUSTOM LOCK". Change via "MENU", "TV", "FEATURES", "CHILD LOCK", and "LOCK".
- **Age Lock.** Indicates the last status of the EPG rating for child lock: "OFF", "4 YEARS", "6 YEARS", "8 YEARS", "10 YEARS", "12 YEARS", "14 YEARS" or "16 YEARS". This is only displayed if child lock is set to "CUSTOM LOCK"
- **Lock After.** Indicates at what time the child lock is set: "OFF" or e.g. "18:45" (lock time). This is only displayed if child lock is set to "CUSTOM LOCK"
- **Category Lock.** Indicates the last status of the EPG theme child lock: "MOVIES", "NEWS", "SHOWS", "SPORTS", "CHILDREN", "MUSIC", "CULTURE", or "SERIES". This is only displayed if child lock is set to "CUSTOM LOCK". It is possible that more than one value is shown.
- **Program Category.** Indicates the theme of the selected transmitter: "MOVIES", "NEWS", "SHOWS", "SPORTS", "CHILDREN", "MUSIC", "CULTURE", or "SERIES".
- **TV Ratings Lock.** Only applicable for US.
- **Movie Ratings Lock.** Only applicable for US.
- **V-Chip TV Status.** Only applicable for US.

CUSTOMER SERVICE MENU 5

- **V-Chip Movie Status.** Only applicable for US.
- **Options 1.** Gives the option codes of option group 1 as set in SAM (Service Alignment Mode).
- **Options 2.** Gives the option codes of option group 2 as set in SAM (Service Alignment Mode).
- **AVL.** Indicates the last status of AVL (Automatic Volume Level): "ON" or "OFF". Change via "MENU", "TV", "SOUND", "AVL"
- **Delta Volume.** Indicates the last status of the delta volume for the selected preset as set by the customer: from "-12" to "+12". Change via "MENU", "TV", "SOUND", "DELTA VOLUME".
- **Front Spkr Dist.** Not applicable for this TV.
- **Front Spkr Dist.** Not applicable for this TV.

How to exit CSM

Use one of the following methods:

- After you press a key on the RC-transmitter (with exception of the "CHANNEL", "VOLUME" and digit (0-9) keys), or
- After you switch the TV-set "OFF" with the mains switch.

Note: When you de-activate CSM, it is possible (depending on the software version) that the size of the picture changes. This can be solved by pushing "P+" and then "P-".

5.3 Problems and Solving Tips (related to CSM)

Note: Below described problems are all related to the TV settings (visible in the CSM menu). The procedures to change the value (or status) of the different settings are described above. New value(s) are automatically stored.

5.3.1 Picture Problems

Snowy/noisy picture

1. Check in CSM line NOISE FIGURE. In case the value is "127" or higher, and the value is also high on other programs, check the aerial cable/aerial system. For some software versions, the noise figure will only be valid when "Active Control" is set to "medium" or "maximum".
2. Check in CSM lines SHARPNESS and NOISE FIGURE. In case the value of line SHARPNESS is "3" or "4" and the value of line NOISE FIGURE is high ("127" or higher), decrease the "Sharpness" value.

Picture too dark

1. Press "Menu", "TV", "Picture", "Smart Picture". In case the picture improves, increase the "Brightness" or the "Contrast" value. The new value(s) are automatically stored (in "personal" pre-set) for all TV channels.
2. Check in CSM line BRIGHTNESS and CONTRAST. If the value of these lines is low (< "10"), increase the "Brightness" or the "Contrast" value via the user menu.

Picture too bright

1. Press "Menu", "TV", "Picture", "Smart Picture". In case the picture improves, decrease the "Brightness" or the "Contrast" value. The new value(s) are automatically stored (in "personal" pre-set) for all TV channels.
2. Check in CSM lines BRIGHTNESS and CONTRAST. If the value of these line is high (> 50), decrease the "Brightness" value or increase the "Contrast" value via the user menu.

White line around picture elements and text

1. Press "Menu", "TV", "Picture", "Smart Picture". In case the picture improves, decrease the "Sharpness" value. The new value is automatically stored (in "personal" pre-set) for all TV channels.
2. Check in CSM line "Sharpness". If the value is high, decrease it. The new value is automatically stored for all TV channels.

No picture

Check in CSM line TUNED BIT. In case the value is "No", install the required program again. Open the installation menu and perform manual installation.

No picture or unstable picture

A scrambled or decoded signal is received.

Black and white picture

Check in CSM line COLOUR. In case the value is low (< "10"), increase the "Colour" value via the user menu. The new value is automatically stored for all TV channels.

No colours/colour lines around picture elements or colours not correct or unstable picture

1. Check in CSM line TV SYSTEM. If a "strange" system pops up, something has gone wrong during installation. Re-install the channel.
2. If in CSM line TV SYSTEM is "L", then the installed system for this pre-set is "France" (SECAM standard). if the country requires a PAL standard, "West Europe" is required. Install the required program again: open the installation menu and perform manual installation. Select system "West Europe".

Menu text not sharp enough

1. Press "MENU", "TV", "PICTURE", "SMART PICTURE". In case picture improves, decrease the contrast value. The new value(s) are automatically stored for all TV channels.
2. Check line "Contrast". If the value is high, decrease the contrast value.

5.3.2 Sound Problems

No sound from left and right speaker

Check line 6 "Volume". The value is low. Increase the value of "Volume". The new value(s) are automatically stored (in "personal" pre-set) for all TV channels.

5.4 Service Tools

5.4.1 ComPair

Introduction

ComPair (Computer Aided Repair) is a service tool for Philips Consumer Electronics products. ComPair is a further development on the European DST (service remote control), which allows faster and more accurate diagnostics. ComPair has three big advantages:

1. ComPair helps you to quickly get an understanding on how to repair the chassis in a short time by guiding you systematically through the repair procedures.
2. ComPair allows very detailed diagnostics (on I^2C level) and is therefore capable of accurately indicating problem areas. You do not have to know anything about I^2C commands yourself because ComPair takes care of this.
3. ComPair speeds up the repair time since it can automatically communicate with the chassis (when the microprocessor is working) and all repair information is directly available. When ComPair is installed together with the Force/SearchMan electronic manual of the defective chassis, schematics and PWBs are only a mouse click away.

Specifications

ComPair consists of a Windows based fault finding program and an interface box between PC and the (defective) product. The ComPair interface box is connected to the PC via a serial (or RS-232) cable.
For this chassis, the ComPair interface box and the TV communicate via a bi-directional service cable via the service connector(s).

The ComPair fault finding program is able to determine the problem of the defective television. ComPair can gather diagnostic information in two ways:

- Automatic (by communication with the television): ComPair can automatically read out the contents of the entire error buffer. Diagnosis is done on I^2C/UART level. ComPair can access the I^2C/UART bus of the television. ComPair can send and receive I^2C/UART commands to the micro controller of the television. In this way, it is possible for ComPair to communicate (read and write) to devices on the I^2C/UART buses of the TV-set.
- Manually (by asking questions to you): Automatic diagnosis is only possible if the micro controller of the television is working correctly and only to a certain extend. When this is not the case, ComPair will guide you through the fault finding tree by asking you questions *(e.g. Does the screen give a picture? Click on the correct answer: YES / NO)* and showing you examples *(e.g. Measure test-point I7 and click on the correct oscillogram you see on the oscilloscope)*. You can answer by clicking on a link *(e.g. text or a waveform picture)* that will bring you to the next step in the fault finding process.

By a combination of automatic diagnostics and an interactive question / answer procedure, ComPair will enable you to find most problems in a fast and effective way.

How To Connect

This is described in the chassis fault finding database in ComPair.

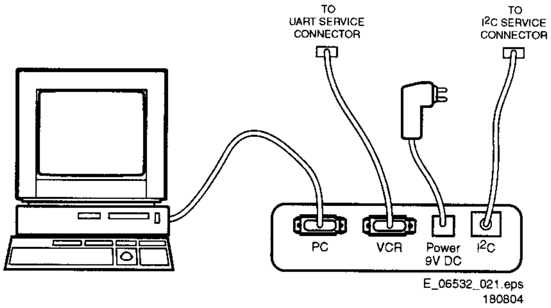

Figure 5-3 ComPair interface connection

How To Order

- Starter kit ComPair32/SearchMan32 software and ComPair interface (excl. transformer): 3122 785 90450.
- ComPair interface (excl. transformer): 4822 727 21631.
- Starter kit ComPair32 software (registration version): 3122 785 60040.
- Starter kit SearchMan32 software: 3122 785 60050.
- ComPair32 CD (update): 3122 785 60070 (year 2002), 3122 785 60110 (year 2003 onwards).
- SearchMan32 CD (update): 3122 785 60080 (year 2002), 3122 785 60120 (year 2003), 3122 785 60130 (year 2004).
- ComPair firmware upgrade IC: 3122 785 90510.
- Transformer (non-UK): 4822 727 21632.
- Transformer (UK): 4822 727 21633.
- ComPair interface cable: 3122 785 90004.
- ComPair interface extension cable: 3139 131 03791.
- ComPair UART interface cable: 3122 785 90630.

Note: If you encounter any problems, contact your local support desk.

Stepwise Start-up

Under normal circumstances, a fault in the power supply, or an error during start-up, will switch the television to protection mode. ComPair can take over the initialisation of the television. In this way, it is possible to distinguish which part of the start-up routine (hence which circuitry) is causing the problem.
Take notice that the transition between two steps can take some time, so give the set some time to reach a stable state. During the transition time, the LED can blink strangely.

Stepwise start- up explanation
This is realised via ComPair and is very helpful when a protection is activated (see also chapter "Protections"). The following diagram shows the start-up procedure of the set. Every step of the stepwise start-up (also called trapped start-up) in the diagram corresponds with the number of times the led blinks.

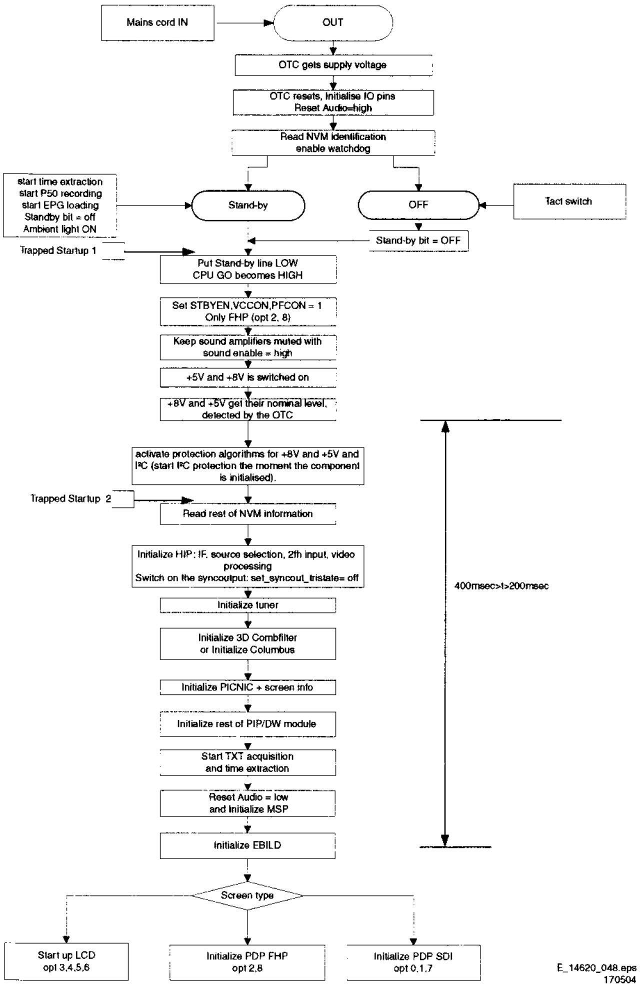
Mains cord IN
OUT
OTC gets supply voltage
OTC resets, Initialise IO pins
Reset Audio=high
Read NVM identification
enable watchdog
start time extraction
start P50 recording
start EPG loading
Standby bit = off
Ambient light ON
Stand-by
OFF
Tact switch
Stand-by bit = OFF
Trapped Startup 1
Put Stand-by line LOW
CPU GO becomes HIGH
Set STBYEN,VCCON,PFCON = 1
Only FHP (opt 2, 8)
Keep sound amplifiers muted with
sound enable = high
+5V and +8V is switched on
+8V and +5V get their nominal level,
detected by the OTC
activate protection algorithms for +8V and +5V and I²C (start I²C protection the moment the component is initialised).
Trapped Startup 2
Read rest of NVM information
Initialize HIP: IF, source selection, 2fh input, video processing
Switch on the syncoutput: set_syncout_tristate= off
400msec>t>200msec
Initialize tuner
Initialize 3D Combfilter
or Initialize Columbus
Initialize PICNIC + screen info
Initialize rest of PIP/DW module
Start TXT acquisition
and time extraction
Reset Audio = low
and Initialize MSP
Initialize EBILD
Screen type
Start up LCD
opt 3,4,5,6
Initialize PDP FHP
opt 2,8
Initialize PDP SDI
opt 0,1,7
E_14620_048.eps
170504

Figure 5-4 Stepwise start-up part 1

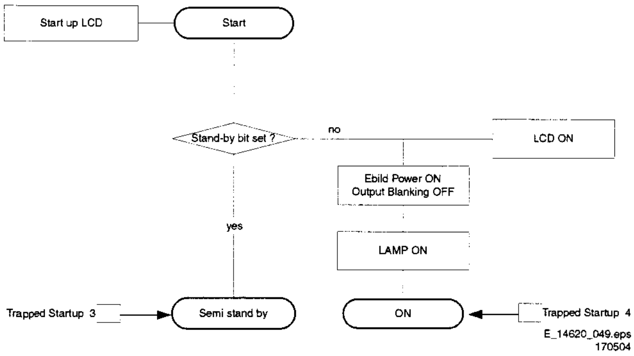
Start up LCD
Start
Stand-by bit set ?
no
LCD ON
Ebild Power ON
Output Blanking OFF
yes
LAMP ON
Trapped Startup 3
Semi stand by
ON
Trapped Startup 4
E_14620_049.eps
170504

Figure 5-5 Stepwise start-up part 2

Note: When the set is in stepwise mode and, due to stepping-up, a protection is activated, the set will really go into protection (blinking LED). The set will not leave the stepwise-mode however. If state X is the state where the set went to protection, stepwise start-up will return to state X-1. At state (X-1) diagnostic measurements can be performed. Also, in the short time the set is in state X but not yet in protection, you can also do some measurements.

5.4.2 LVDS Tool

Introduction
This service tool (also called "ComPair Assistant 1") may help you to identify, in case the TV does not show any picture, whether the Small Signal Board (SSB) **or** the display of a Flat TV is defective.
Furthermore it is possible to program EPLDs with this tool (Byteblaster). Read the user manual for an explanation of this feature.

Since 2004, the LVDS output connectors in our Flat TV models are standardised (with some exceptions). With the two delivered LVDS interface cables (31p and 20p) you can cover most chassis (in special cases, an extra cable will be offered).

When operating, the tool will show a small (scaled) picture on a VGA monitor. Due to a limited memory capacity, it is not possible to increase the size when processing high-resolution LVDS signals (>= 1280x768). Generally this tool is intended to determine if the SSB is working or not. Thus to determine if LVDS, RGB, and sync signals are okay.

How to Connect
Connections are explained in the user manual, which is delivered with the tool.

Note: To use the LVDS tool, you must have ComPair release 2004-1 (or later) on your PC (engine version >= 2.2.05).
For every TV type number and screen size, one must choose the proper settings via ComPair. The ComPair file will be updated regularly with new introduced chassis information.

How to Order
- LVDS tool (incl. two LVDS cables: 31p and 20p):
  3122 785 90671.
- Service Manual LVDS tool:
  3122 785 00810.

5.5 Error Codes

5.5.1 Introduction

The error code buffer contains all detected errors since the last time the buffer was erased. The buffer is written from left to right, new errors are logged at the left side, and all other errors shift one position to the right.
When an error has occurred, the error is added to the list of errors, provided the list is not full or the error is a protection error.
When an error occurs and the error buffer is full, then the new error is not added, and the error buffer stays intact (history is maintained), except when the error is a protection error.
To prevent that an occasional error stays in the list forever, the error is removed from the list after 50+ operation hours.
When multiple errors occur (errors occurred within a short time span), there is a high probability that there is some relation between them.

5.5.2 How to read the Error Buffer

Use one of the following methods:
- On screen via the SAM (only if you have a picture). Examples:
  - **0 0 0 0 0**: No errors detected
  - **6 0 0 0 0**: Error code 6 is the last and only detected error
  - **9 6 0 0 0**: Error code 6 was first detected and error code 9 is the last detected error
- Via the blinking LED procedure (when you have no picture). See next paragraph.
- Via ComPair.

5.5.3 How to clear the Error Buffer

Use one of the following methods:

- By activation of the "RESET ERROR BUFFER" command in the SAM menu.
- With a normal RC, key in sequence "MUTE" followed by **"062599"** and "OK".
- When you transmit the commands "DIAGNOSE" - "99" - "OK" with ComPair (or with a DST).
- If the content of the error buffer has not changed for 50+ hours, it resets automatically.

5.5.4 Error Codes

In case of non-intermittent faults, clear the error buffer before you begin the repair. This to ensure that old error codes are no longer present. Before clearing the buffer, write down the content, as this history can give you significant information.
If possible, check the entire contents of the error buffer. In some situations, an error code is only the result of another error code and not the actual cause (e.g., a fault in the protection detection circuitry can also lead to a protection).
There are various errors:

- I^2C device errors.
- I^2C bus errors.
- Protection errors.
- Errors not related to an I^2C device, but of importance:
  - **FEM (Falconic with Embedded Memory) (Error 26):** at start-up, after initialisation of the PICNIC, the presence of the FEM can be checked.
  - **Eagle (Error 27):** at start-up, after initialisation of the PICNIC, the presence of the Eagle can be checked.

Table 5-3 Error Code Overview

Error	Device	Description	Def. item	Def. Module indication	Diagr.
1	M24Cxx	NVM, spontaneous blinking error 1	7011	-	B5a
3	SAA4978	PICNIC	7713	Feature Box	B3a
4	Supply 5 V	5V protection	-	+5V Supply	B5a
5	Supply 8 V	8V protection	-	+8V Supply	B5a
6	Slow I^2C bus blocked	Spontaneous blinking error 6	-	Slow I^2C Blocked	-
8	TDA932x	HIP High-end Input Processor	7323	Chroma IF IO	B2
13	UV1318/...	Tuner protection	1T01	Tuner	B13a
14	MSPxxxx	ITT sound processor	7A02	Audio module	B6a
18	Fast I^2C bus blocked	Spontaneous blinking error 18	-	Fast I^2C Blocked	-
21	M62320	I/O Expander	7P56	Video Dual Screen	B15b
26	SAA4998	FEM (Falconic with Embedded Memory)	7760	+3V (FBX) Supply	B3b
27	T6TX5	Eagle 1C	7720	+3V (FBX) Supply	B3c
32	M29W400xx	Flash Ram (EPG)	7012	EPG Memory	B5a
35	T6TU5	Columbus	7752	Video Control	B3d
55	DC/DC converter	One of the voltages is not ok + protection error	-	MSB	-
76	Audio supply	Audio supply protection	-	-	-
118	AD9883A	AD converter	7L01	HD	B19a
121	EPLD	EPLD error	7V01	Video control	B19d
Note: If error 3 or error 55 appears, sometimes error 16 is also logged. Error 16 is a non existing error.					

Note:

- Error codes 1, 6, or 18 are protection codes and in this case, supplies of some circuits will be switched "off". Also, in protection, the LED will blink the number of times equivalent to the most recent error code.

5.6 The Blinking LED Procedure

5.6.1 Introduction

Via this procedure, you can make the contents of the error buffer visible via the front LED. This is especially useful for fault finding, when there is no picture.

When the SDM is activated, the front LED will show (blink) the contents of the error-buffer. Error-codes > 10 are shown as follows:

- A long blink of 750 ms (which is an indication of the decimal digit),
- A pause of 1.5 s,
- "n" short blinks (where "n" = 1 - 9),
- When all the error-codes are displayed, the sequence finishes with a LED blink of 3 s,
- The sequence starts again.

Note: For error codes >100, the first two digits (hundred-and-ten) are considered as one digit (one long blink)

Example: Error 12 9 6 121 0.
After activation of the SDM, the front LED will show:

- 1 long blink of 750 ms (which is an indication of the decimal digit) followed by a pause of 1.5 s,
- 2 short blinks followed by a pause of 3 s,
- 9 short blinks followed by a pause of 3 s,
- 6 short blinks followed by a pause of 3 s,
- 12 long blinks of 750 ms (which is an indication of "120") followed by a pause of 1.5 s,
- 1 short blink followed by a pause of 3 s,
- 1 long blink of 3 s to finish the sequence,
- The sequence starts again.

Note: If errors 1, 6, or 18 occur, the LED always gives the last occurred error even if the TV is NOT in service mode.

5.6.2 How to Activate

Use one of the following methods:

- Activate the SDM (only via soldering pads marked "SDM" on SSB, see figure "Service pads"). The blinking front LED will show the entire contents of the error buffer (this works in "normal operation" mode and in "protection" mode).
- Transmit the commands "MUTE" - **"062500"** - "OK" with a normal RC. The complete error buffer is shown. Take notice that it takes some seconds before the blinking LED starts.
- Transmit the commands "MUTE" - **"06250x"** - "OK" with a normal RC (where "x" is a number between 1 and 5). When x= 1 the last detected error is shown, x= 2 the second last error, etc.... Take notice that it takes some seconds before the blinking LED starts.
- "DIAGNOSE X" with the DST (where "x" is a number between 1 and 5). When x= 1 the last detected error is shown, x= 2 the second last error, etc.... When x = 0 all errors are shown.

5.7 Protections

5.7.1 Introduction

This chassis has only one microprocessor (OTC), which remains active during Stand-by. This because power of the microprocessor and the attached memory chip set is coming from the 3V3 supply, which is derived from the 5V Stand-by-circuitry. Therefore, in both Power-on as in Stand-by mode, the microprocessor is connected to this power supply.

If a fault situation is detected, an error code will be generated and if necessary, the TV is put in protection mode. The protection mode is indicated by the blinking of the front LED at a frequency of 3 Hz (or by a coded blinking in special cases).

The content of the error buffer can be read via the service menu (SAM), the blinking LED procedure or via DST/ComPair.

To get a quick diagnosis, this chassis has three service-modes implemented:

- The **Customer Service Mode** (CSM).
- The **Service Default Mode** (SDM). Start-up of the TV in a predefined way.
- The **Service Alignment Mode** (SAM). In this mode, items of the TV can be adjusted via a menu.

You can activate both SDM and SAM modes via the "service pads" on the SSB (see figure "Service pads"), via an RC-transmitter (DST or standard RC), or via ComPair. It is not possible to activate the SAM in "stand-by"; the TV has to be in "normal operation" mode.

The "Protection Diagram" shows the structure of the protection system. See diagram below.

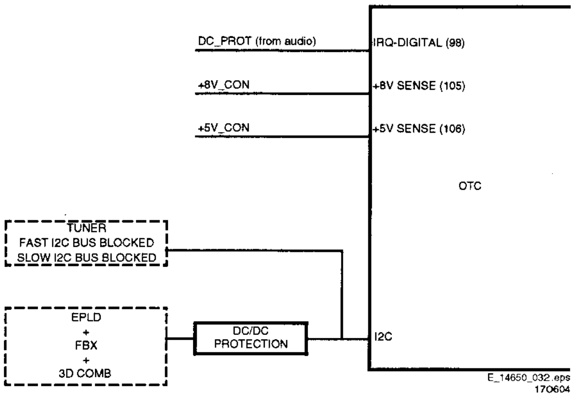

Figure 5-6 Protection diagram

There are several types of protections:

- I^2C related protections.
- OTC related protections (via polling on I/O pins or via algorithms).
- Hardware protection

All protections are explained below.

5.7.2 I^2C Related Protections

In normal operation, some registers of the I^2C controlled ICs are refreshed every 200 ms. During this sequence, the I^2C buses and the I^2C ICs are checked.
An I^2C protection will take place if the SDA and SCL lines are short-circuited to ground, or to each other. An I^2C error will also occur, if the power supply of the IC is missing.

DC/DC protection: When a 3V3 supply is short-circuited, the DC/DC converter switches "off" and goes in protection. The FBX, EPLD IC, and 3D comb IC have no supply voltage and give no acknowledge. In this case, the TV should go into protection. An error code is written in the NVM: DC/DC error.

FBX protection: the FBX protection is not available any more. It is replaced by the DC/DC protection.

5.7.3 OTC Related Protections

If a protection is detected at an OTC input, the OTC will start to scan all protection inputs every 200 ms for 5 times. If the protection on one of the inputs is still active after 1 s, the microprocessor will put the TV in the protection mode. Before the scanning is started, a so-called "ESD refresh" is carried out.

This is done, because the interrupt on one of the inputs is possibly caused either by a flash or by ESD. As a flash or ESD can influence IC settings, the HIP, MSP, 3D Comb and wireless module (not used in this set) are initialised again, to ensure the normal picture and sound conditions of the TV.

8 V and 5 V protections: The microprocessor senses the presence of the 8 V and 5 V (via the "+5V_CON" and "+8V_CON" lines). If one (or both) of these voltages is (are) not present, an error code is stored in the error buffer of the NVM, and the TV is put in the protection mode.

Audio Supply protection: The OTC senses if the audio module is in protection via IRQ-DIGITAL (pin 98 of OTC). If this is the case, the OTC puts the TV in protection.

5.7.4 Hardware Protection

Short-circuiting the 3V3 supply from the DC/DC converter will shut down the DC/DC converter. The absence of the 3V3 supply line is also sensed via I^2C (see description Audio Supply protection above), this is useful if there is something wrong in the detection circuit of the DC/DC converter.

Audio DC Protection: This protection occurs when there is a DC voltage on the speakers. In that case, the Main Supply is switched "off". The Stand-by Supply is still working.

Repair tip: If there is an audio DC protection (DC voltage on your speakers), you will probably see error 18 blink. To be sure this is an audio DC protection, disconnect the cable between the SSB and the audio PWB and also the cable between the Main Supply and the Audio PWB. If the TV starts up, it is very likely that there is DC on the speakers. Check, and replace if necessary, the audio amplifiers.
Note: It is also possible that you have an Audio DC Protection because of an interruption in one or both speakers (the DC voltage that is still on the circuit can not disappear through the speakers).

5.8 Repair tips

5.8.1 3V3 Supply (DC/DC converter on the SSB)

As mentioned above, the DC/DC converter is switched "off" when something goes wrong (detection of a missing 3V3 supply at one of the devices supplied by the 3V3). Because of this, the TV goes to protection (I^2C protection). Error code "55" is logged.
For further diagnoses, you need to overrule the I^2C protection: put the TV in Service Default Mode by means of the solder pads on the SSB (see figure "Service pads").
The DC/DC converter is still not working because it is switched "off" by the 3V3_FAULT line (schematic B12). Now you have some possibilities:

1. First, measure the impedance over diode 6U06. In normal conditions, you should measure approximately 120 ohm (if possible, verify this with another set). If the impedance is much too low, do not try to start up the converter as mentioned below. Remind that if FET 7U03 is short-circuited, this will also influence your measurement.
2. Desolder coils 5U05 and 5U06, connect an external 3V3 supply at capacitor 2U23 (current limitation to 500 mA) and a second external 3V3 supply at capacitor 2U31 (current limitation to 800 mA). The normal working current of the 3V3_SIM line is approximately 400 mA and the normal working current for the 3V3_DCDCFBX line is approximately 700 mA. Therefore, if one of the currents exceeds their nominal value you can determine in which circuit the overload is situated. If the TV would start up and you have normal picture, there is probably no overload but a problem in the detection circuits.
3. If you do not have two external power supplies, you can do the following: Desolder coils 5U02, 5U03, and 5U04 (you must desolder all three, otherwise the circuit could be damaged), connect an external power supply of 3V3 at the cathode of diode 6U06. Make sure to limit the current of this external supply to approximately 1200 mA. If the supplied current exceeds 1100 mA (approximately normal working current) you can conclude that one of the devices supplied by 3V3 is short-circuited.
4. Another possibility is to force the converter to start up by short-circuiting (and keep short-circuited) resistor 3U25 (B12).
Caution: Be aware that this can damage the TV. Even if you measure approximately 120 ohm over diode 6U06, there can still be something wrong in the converter itself. By short-circuiting resistor 3U25, the internal protection of the converter is disabled.

5.8.2 Protections

Activating SDM via the "service pads" will overrule the processor-controlled protections, but not the hardware protections. This means, that the A/D-input protections (5 and 8 V) and the I^2C "not-acknowledging" info of FBX + EPLD + 3D Comb and of the tuner are overruled.
Caution: When doing this, the service technician must know what he is doing, as it could lead to damaging the TV.

Note: It can sometimes take up to half a minute before the TV goes to protection!

5.8.3 Repair tip table

Table 5-4 Repair tips

Phenomenon	Possible Cause	Repair tip
"F" in right corner of the screen and set is not reacting on remote control. The local keyboard is functioning.	TV is in factory mode.	Press MENU button on local keyboard for at least 3 seconds. Set will leave factory mode and function normally again.
No picture, LED blinking at 3 Hz.	Set is in protection due to various causes. For error codes see error-code list.	You have no picture, so: - Read the error buffer via ComPair (error buffer is accessible when set is in protection, ComPair-file will guide you to this). - Read the blinking LED information via standard remote command <mute>**06250x**<ok>. - Or you read the error code sequence via standard remote command <mute>**062500**<ok>. When you have found the error, check the circuitry related to the supply voltage and I^2C-communication or the circuitry that triggers the protection.
No picture, LED blinking with code 6-6-6 or 18-18-18.	No communication on slow I^2C- or fast I^2C-bus.	As processor cannot communicate with one of the 2 buses, the Stand-by-LED spontaneously starts blinking 6-6-6-etc. or 18-18-18-etc... If in the error buffer somewhere is an error 6 or 18, these will have the highest priority starting the mentioned blinking. Measure, dependent of the error on the I^2C-bus, which device is loading the bus (use I^2C-overview).
No picture, LED blinking with code 1-1-1.	No communication on NVM-I^2C bus to the uP.	As the uP cannot communicate with the NVM I^2C bus, it spontaneously starts blinking 1-1-1. **Note:** when there is no access to the NVM, a lot of picture setting can go wrong.
No RC-reception. Blue LED does not echo RC-commands.	uP circuitry or RC-receiver is defective.	In case the TV does react on a local keyboard operation, you must check the RC-receiver circuitry (diagram "J").
Picture is not synchronised.	The sync is derived in the HIP.	Check crystals in the HIP circuit on bad contacts.
Picture is distorted.	Check video-path in Service Default Mode.	Investigate whether there is an error code present in the error buffer. In case there is one, check the I^2C-bus and/or supply lines (see overview supply lines). Measure and check signal path Tuner-HIP-FBX-EPLD.
Picture with horizontal stripes.	Pixel Plus processing is malfunctioning	Check functionality on circuitry (B3a, B3b, B3c and B3d) of PICNIC, FEM, EAGLE, COLUMBUS and/or field memories. **Tip:** the whole Pixel Plus chipset can be diagnosed via ComPair.
No NextView (EPG).	IC7012 defective or not powered.	Check circuitry around IC7012 on diagram "B5a".
No Teletext.	IC7007 defective or not powered.	Check circuitry around IC7007 on diagram "B5a".
Problems caused by EPG (Electronic Program Guide). The TV set "hangs".	Problems with NexTView EPG broadcasts.	To switch from EPG 2C3 to Teletext guide, press for 4 seconds, simultaneously the MENU button on the TV and digit 0 on the remote. The option settings for NexTView type and FlashRAM will not change.
NexTView EPG is not functioning only Teletext guide.	EPG version 2C3 is switched "off" during production.	To switch from Teletext guide to EPG 2C3, press for 4 seconds, simultaneously the MENU button on the TV and digit 1 on the remote. The option settings for NexTView type and Flashram will not change.
Various symptoms, due to missing local supply voltage.	An interrupted fuse, NFR-resistor or connection.	When no symptom or error code leads you to a specific circuitry, use the supply lines overview (see supply lines overview), for a quick scan of all supply lines.
No sound at the speakers but sound at monitor out.	Possible problem with the class D amplifier	Check circuitry around IC7700 on diagram "SA3" (LCD) or "C" (PDP).
No sound at the speakers but sound at monitor out.	Sound enable from OTC is HIGH, speakers are muted	Check pin 95 of OTC on diagram "B5a".
No sound at the speakers not at monitor out, but sound at SCART 1 output.	POR line is low, anti plop circuit mutes the sound	Check pin 8 on connector 1739 on audio panel. Diagram "C" for PDP sets and diagram "SA3" for LCD sets
No sound from any output (except headphone)	Reset audio is high or MSP is not properly reset	Check pin 16 of MSP (diagram "B6a") and circuitry around MSP.
No sound from the tuner but sound from any other input.	Problem with the delay line (PDP sets only)	Check circuitry on diagram "B6d".

5.9 Software Downloading

In this chassis, you can **upgrade** the main software via ComPair without removing the back cover of the TV (it is possible that early production sets don't have a hole in the back plate, in this case you have to remove the back plate). The switch, which is needed for the software downloading procedure, can be reached through a gap in the back cover or the SSB shielding. The switch can be operated with a toothpick or something like that. Make sure that you do not damage the PWB with sharp objects. You can find more information on how this procedure works in the ComPair file. It is possible that not all sets are equipped with the hardware, needed to make software upgrading possible. To speed up the programming process the firmware of the ComPair interface can be upgraded. See paragraph "How To Order" for the order number.

Personal Notes:

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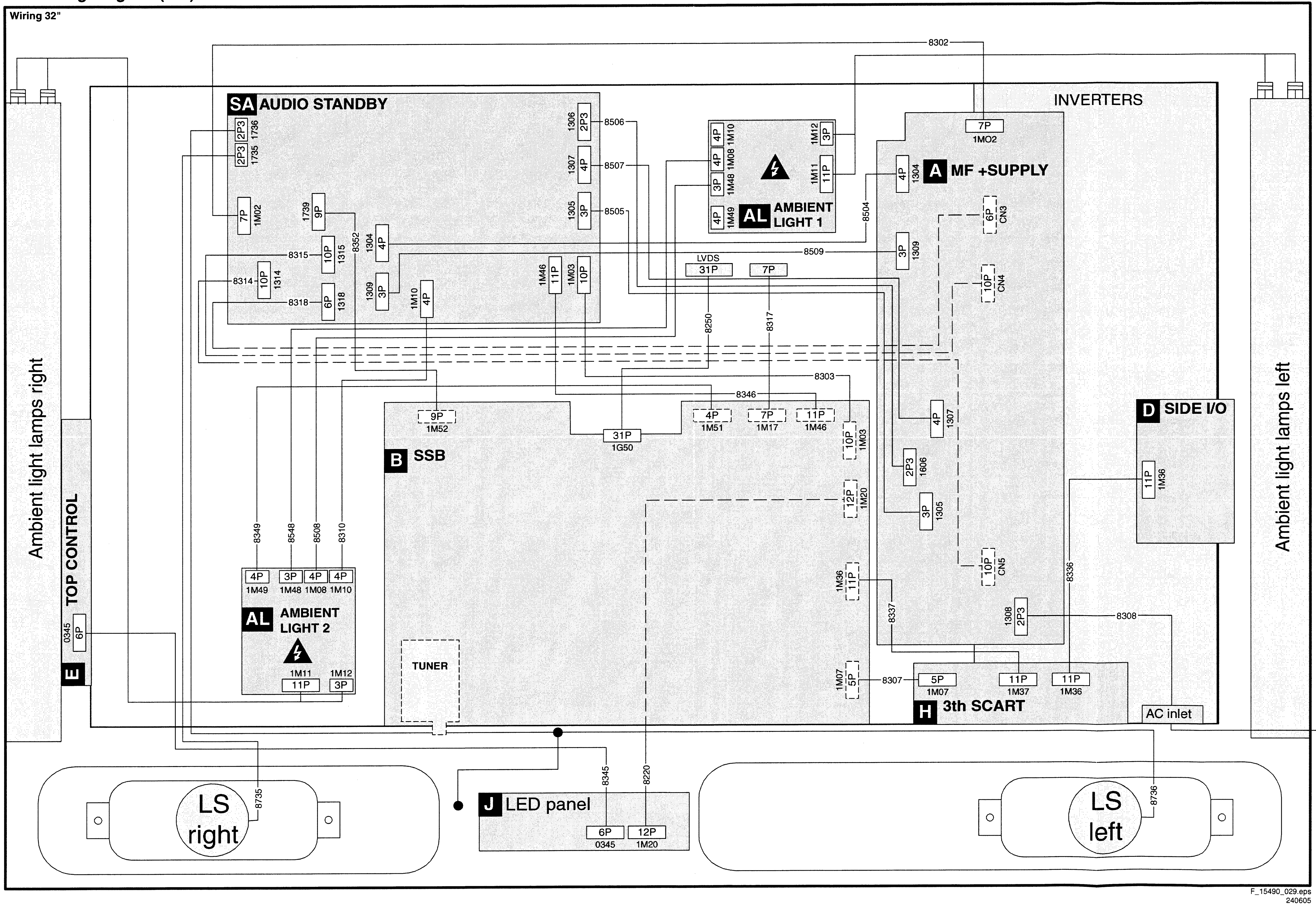
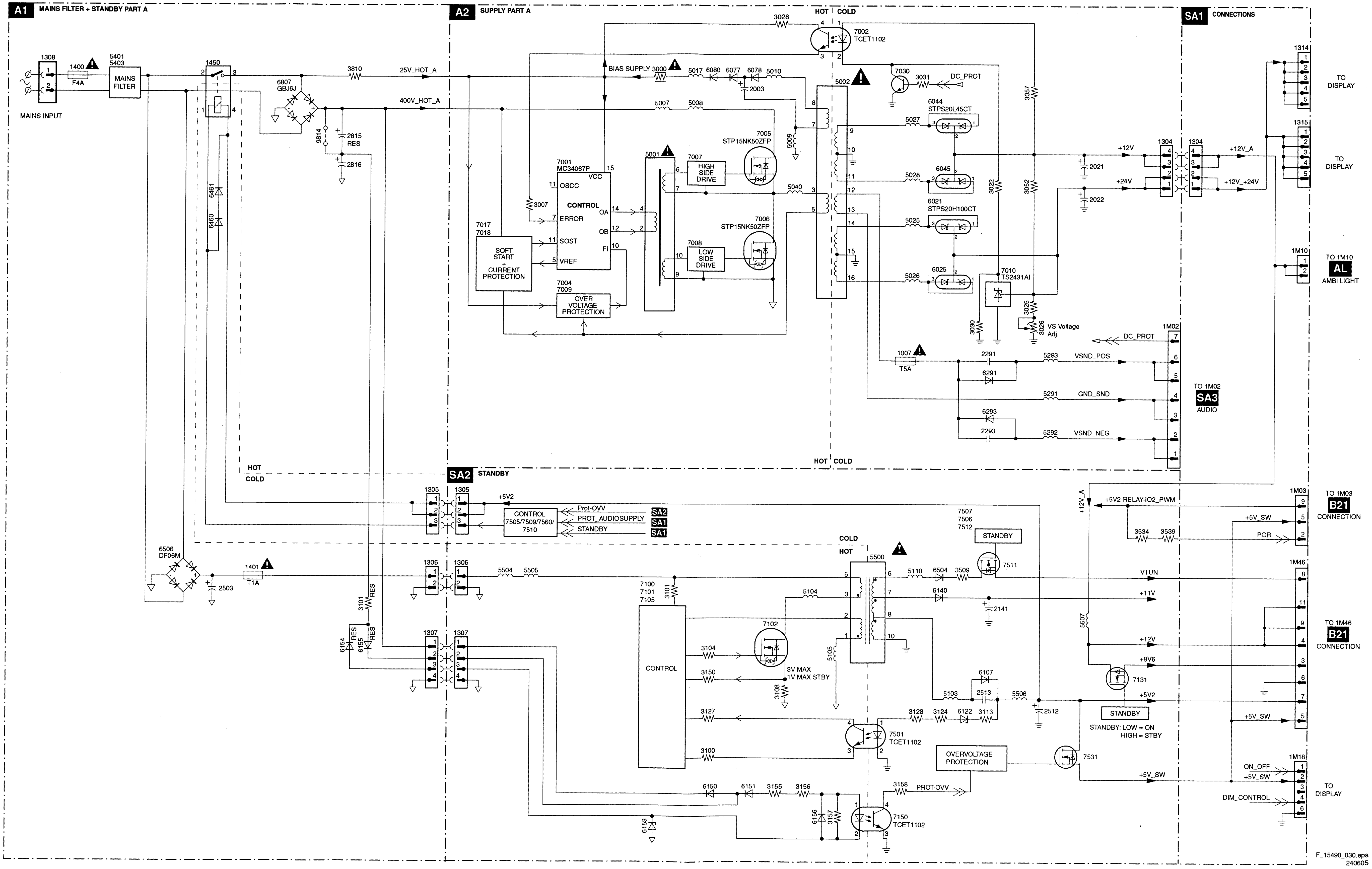
6. Block Diagrams, Testpoint Overviews, and Waveforms

Wiring Diagram (32”)


Wiring 32"
SA AUDIO STANDBY
2P3 1736
2P3 1735
7P 1M02
1739 9P
1304 4P
1315 10P
1314 10P
1318 6P
1309 3P
1M10 4P
1M46 11P
1M03 10P
1306 2P3
1307 4P
1305 3P
8506
8507
8505
8315
8314
8318
8352
8302
AL AMBIENT LIGHT 1
4P 1M10
4P 1M08
3P 1M48
4P 1M49
1M12 3P
1M11 11P
INVERTERS
7P 1MO2
A MF +SUPPLY
4P 1304
8504
6P CN3
3P 1309
8509
10P CN4
LVDS 31P
7P
8250
8317
8303
8346
4P 1307
2P3 1606
3P 1305
10P CN5
1308 2P3
8308
8336
D SIDE I/O
11P 1M36
Ambient light lamps left
Ambient light lamps right
TOP CONTROL
0345 6P
E
8349
8548
8508
8310
4P 1M49
3P 1M48
4P 1M08
4P 1M10
AL AMBIENT LIGHT 2
1M11 11P
1M12 3P
9P 1M52
31P 1G50
4P 1M51
7P 1M17
11P 1M46
10P 1M03
B SSB
12P 1M20
1M36 11P
8337
1M07 5P
8307
TUNER
5P 1M07
11P 1M37
11P 1M36
H 3th SCART
AC inlet
8345
8220
J LED panel
6P 0345
12P 1M20
8735
LS right
8736
LS left
8192
F_15490_029.eps
240605

Block Diagram Supply (32")

SUPPLY + STANDBY 32"


A1 MAINS FILTER + STANDBY PART A
A2 SUPPLY PART A
SA1 CONNECTIONS
SA2 STANDBY
MAINS INPUT
1308
1400 F4A
5401
5403
MAINS FILTER
1450
6807 GBJ6J
3810
25V_HOT_A
400V_HOT_A
9814
2815 RES
2816
6461
6460
HOT
COLD
3028
7002 TCET1102
BIAS SUPPLY 3000
5017 6080 6077 6078 5010
2003
5007 5008
5009
7005 STP15NK50ZFP
5001
7007 HIGH SIDE DRIVE
7008 LOW SIDE DRIVE
7006 STP15NK50ZFP
5040
7001 MC34067P
VCC
OSCC
CONTROL
ERROR
SOST
VREF
OA
OB
FI
3007
7017
7018
SOFT START + CURRENT PROTECTION
7004
7009
OVER VOLTAGE PROTECTION
5002
7030
3031
DC_PROT
6044 STPS20L45CT
5027
6045
5028
6021 STPS20H100CT
5025
6025
5026
3057
3022
3052
7010 TS2431AI
3025
3026
3030
VS Voltage Adj.
2021
2022
+12V
+24V
1304
+12V_A
+12V_+24V
1314
1315
TO DISPLAY
1M10
TO 1M10
AL
AMBI LIGHT
1M02
1007 T5A
2291
6291
6293
2293
5293 VSND_POS
5291 GND_SND
5292 VSND_NEG
TO 1M02
SA3
AUDIO
1305
+5V2
CONTROL 7505/7509/7560/7510
Prot-OVV
PROT_AUDIOSUPPLY
STANDBY
6506 DF06M
1401 T1A
2503
1306
5504 5505
1307
3101 RES
6154 RES
6155 RES
7100
7101
7105
3101
5104
7102
3104
3150
3V MAX
1V MAX STBY
3108
5105
5500
5110 6504 3509
6140
2141
7507
7506
7512
STANDBY
7511
VTUN
+11V
CONTROL
3127
3100
7501 TCET1102
3128 3124 6122 3113
6107
5103
2513
5506
2512
+12V_A
+5V2-RELAY-IO2_PWM
3534 3539
+5V_SW
POR
5507
+12V
+8V6
7131
+5V2
STANDBY
STANDBY: LOW = ON HIGH = STBY
OVERVOLTAGE PROTECTION
7531
+5V_SW
3158 PROT-OVV
6150 6151 3155 3156
6156 3157
7150 TCET1102
6153
1M03
TO 1M03
B21
CONNECTION
1M46
TO 1M46
B21
CONNECTION
1M18
ON_OFF
+5V_SW
DIM_CONTROL
TO DISPLAY

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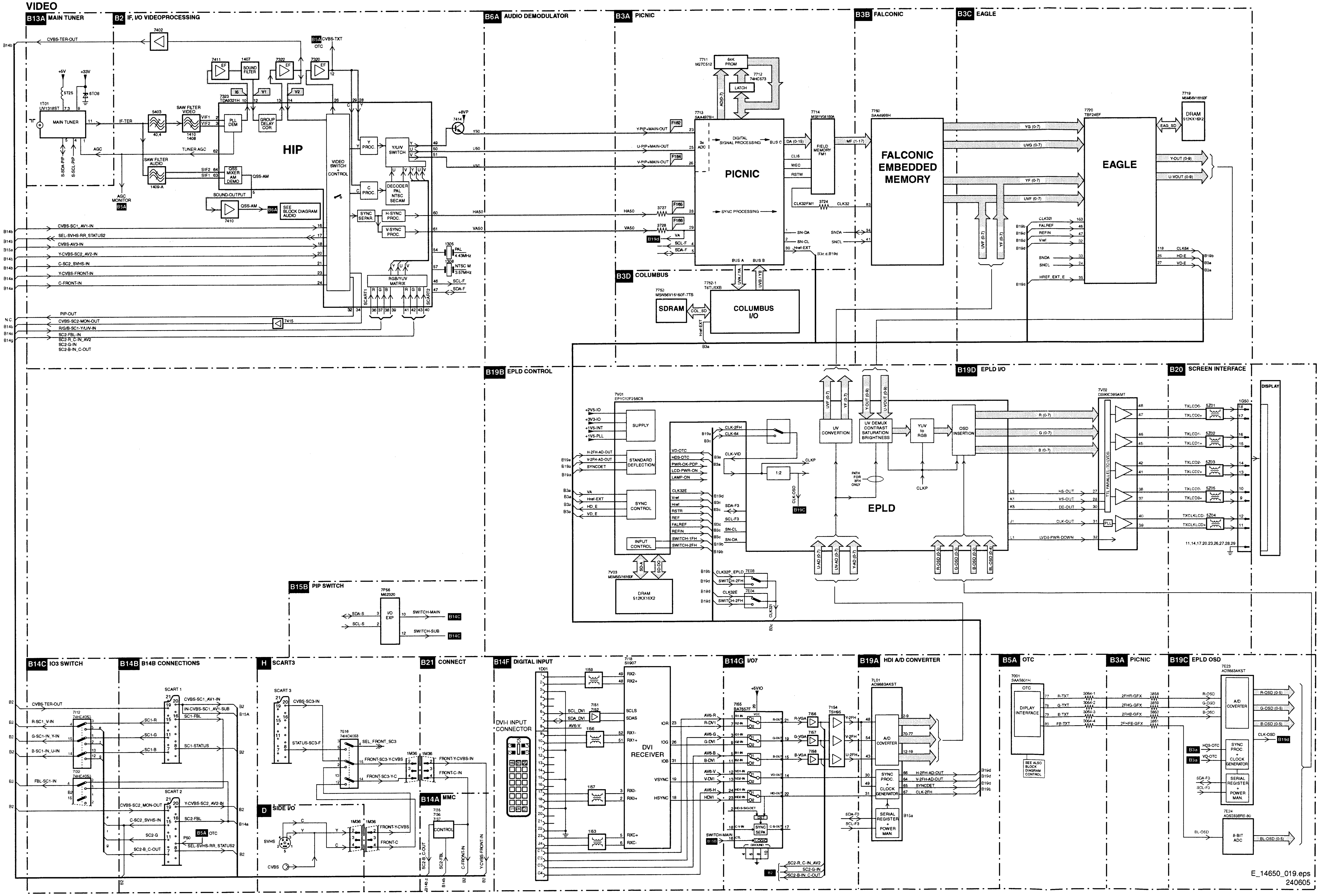
240605

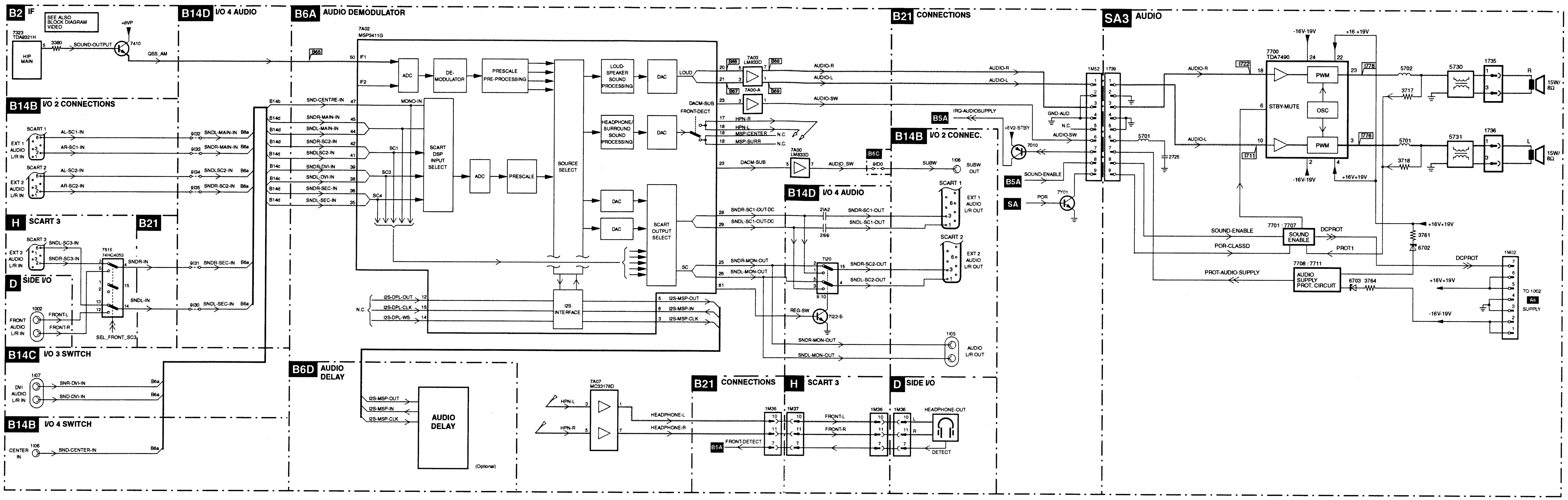
Block Diagram Video


VIDEO
B13A MAIN TUNER
B2 IF, I/O VIDEOPROCESSING
B6A AUDIO DEMODULATOR
B3A PICNIC
B3B FALCONIC
B3C EAGLE
B3D COLUMBUS
B19B EPLD CONTROL
B19D EPLD I/O
B20 SCREEN INTERFACE
B15B PIP SWITCH
B14C IO3 SWITCH
B14B CONNECTIONS
H SCART3
B21 CONNECT
B14F DIGITAL INPUT
B14G I/O7
B19A HDI A/D CONVERTER
B5A OTC
B3A PICNIC
B19C EPLD OSD
D SIDE I/O
B14A MMC
MAIN TUNER
HIP
VIDEO SWITCH + CONTROL
PICNIC
FALCONIC EMBEDDED MEMORY
EAGLE
COLUMBUS I/O
SDRAM
DRAM 512KX16X2
EPLD
SUPPLY
STANDARD DEFLECTION
SYNC CONTROL
INPUT CONTROL
UV CONVERTION
UV DEMUX CONTRAST SATURATION BRIGHTNESS
YUV to RGB
OSD INSERTION
DISPLAY
DVI RECEIVER
DVI-I INPUT CONNECTOR
A/D CONVERTER
SYNC PROC + CLOCK GENERATOR
SERIAL REGISTER + POWER MAN
DISPLAY INTERFACE
8-BIT ADC
I/O EXP
SVHS
CVBS
CONTROL

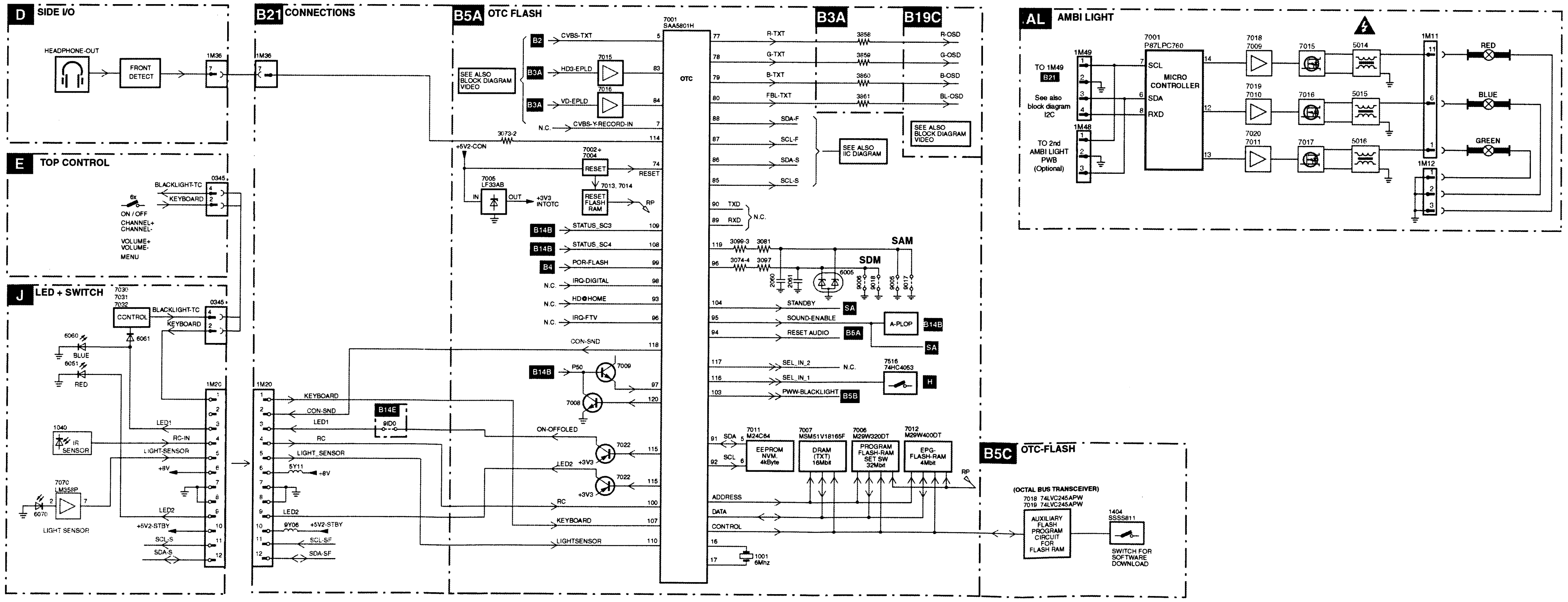
E_14650_019.eps
240605

Block Diagram Audio

AUDIO


B2 IF
SEE ALSO BLOCK DIAGRAM VIDEO
7323 TDA9321H
HIP MAIN
3380
SOUND-OUTPUT
7410
+8VP
QSS_AM
B14D I/O 4 AUDIO
B6A AUDIO DEMODULATOR
7A02 MSP3411G
IF1
IF2
ADC
DE-MODULATOR
PRESCALE PRE-PROCESSING
LOUD-SPEAKER SOUND PROCESSING
DAC
HEADPHONE/ SURROUND SOUND PROCESSING
SCART DSP INPUT SELECT
PRESCALE
SOURCE SELECT
SCART OUTPUT SELECT
I2S INTERFACE
MONO-IN
SND-CENTRE-IN
SNDR-MAIN-IN
SNDL-MAIN-IN
SNDR-SC2-IN
SNDL-SC2-IN
SNDR-DVI-IN
SNDL-DVI-IN
SNDR-SEC-IN
SNDL-SEC-IN
SC1
SC3
SC4
LOUD
DACM-SUB
FRONT-DECT
HPN-R
HPN-L
MSP-CENTER
MSP-SURR
N.C.
DACM-SUB
SNDR-SC1-OUT-DC
SNDL-SC1-OUT-DC
SC
SNDR-MON-OUT
SNDL-MON-OUT
I2S-DPL-OUT
I2S-DPL-CLK
I2S-DPL-WS
I2S-MSP-OUT
I2S-MSP-IN
I2S-MSP-CLK
7A03 LM833D
7A00-A
7A00 LM833D
AUDIO-R
AUDIO-L
AUDIO-SW
AUDIO_SW
SUBW
1106
SUBW OUT
B14B I/O 2 CONNECTIONS
SCART 1
EXT 1 AUDIO L/R IN
AL-SC1-IN
AR-SC1-IN
SCART 2
EXT 2 AUDIO L/R IN
AL-SC2-IN
AR-SC2-IN
H SCART 3
B21
SCART 3
EXT 3 AUDIO L/R IN
SNDL-SC3-IN
SNDR-SC3-IN
7515 74HC4053
SNDR-IN
SNDL-IN
D SIDE I/O
1002
FRONT AUDIO L/R IN
FRONT-L
FRONT-R
SEL_FRONT_SC3
B14C I/O 3 SWITCH
1107
DVI AUDIO L/R IN
SNR-DVI-IN
SND-DVI-IN
B14B I/O 4 SWITCH
1106
CENTER IN
SND-CENTER-IN
B6D AUDIO DELAY
AUDIO DELAY
(Optional)
B21 CONNECTIONS
B5A
IRQ-AUDIOSUPPLY
B14B I/O 2 CONNEC.
+5V2-STBY
7010
B5C
SOUND-ENABLE
B5A
SA
POR
7Y01
B14D I/O 4 AUDIO
2IA2
2I59
SNDR-SC1-OUT
SNDL-SC1-OUT
SCART 1
EXT 1 AUDIO L/R OUT
SCART 2
EXT 2 AUDIO L/R OUT
7120
SNDR-SC2-OUT
SNDL-SC2-OUT
REG-SW
7122-B
SNDR-MON-OUT
SNDL-MON-OUT
1105
AUDIO L/R OUT
7A07 MC33178D
HPN-L
HPN-R
HEADPHONE-L
HEADPHONE-R
B21 CONNECTIONS
H SCART 3
D SIDE I/O
1M36
1M37
FRONT-L
FRONT-R
FRONT-DETECT
B5A
HEADPHONE-OUT
DETECT
SA3 AUDIO
1M52
1739
GND-AUD
AUDIO-SW
-16V-19V
+16 +19V
7700 TDA7490
STBY-MUTE
PWM
OSC
PWM
AUDIO-R
AUDIO-L
5701
2725
5702
5730
1735
3717
3718
5731
1736
R
L
15W/ 8Ω
SOUND-ENABLE
POR-CLASSD
7701 : 7707
SOUND ENABLE
DCPROT
PROT1
+16V+19V
3761
6702
7708 : 7711
AUDIO SUPPLY PROT. CIRCUIT
PROT-AUDIO-SUPPLY
6703
3764
+16V+19V
-16V-19V
1M02
TO 1002 A6 SUPPLY

CONTROL


D SIDE I/O
HEADPHONE-OUT
FRONT DETECT
1M36
B21 CONNECTIONS
B5A OTC FLASH
7001 SAA5801H
OTC
B2 CVBS-TXT
B3A HD3-EPLD
B3A VD-EPLD
7015
7016
SEE ALSO BLOCK DIAGRAM VIDEO
N.C. CVBS-Y-RECORD-IN
+5V2-CON
3073-2
7002+7004
RESET
7006 LF33AB
+3V3 INTOTC
7013, 7014
RESET FLASH RAM
RP
B14B STATUS_SC3
B14B STATUS_SC4
B4 POR-FLASH
N.C. IRQ-DIGITAL
N.C. HD@HOME
N.C. IRQ-FTV
CON-SND
B14B P50
7009
7008
ON-OFFOLED
7022
LED2
+3V3
RC
KEYBOARD
LIGHTSENSOR
B3A
B19C
R-TXT
G-TXT
B-TXT
FBL-TXT
R-OSD
G-OSD
B-OSD
BL-OSD
3858
3859
3860
3861
SDA-F
SCL-F
SDA-S
SCL-S
SEE ALSO I2C DIAGRAM
SEE ALSO BLOCK DIAGRAM VIDEO
TXD
RXD
N.C.
SAM
SDM
STANDBY
SA
SOUND-ENABLE
RESET AUDIO
B6A
A-PLOP
B14B
SA
SEL_IN_2
SEL_IN_1
N.C.
7516 74HC4053
H
PWM-BLACKLIGHT
B5B
7011 M24C64
EEPROM NVM. 4kByte
7007 MSM51V18165F
DRAM (TXT) 16Mbit
7006 M29W320DT
PROGRAM FLASH-RAM SET SW 32Mbit
7012 M29W400DT
EPG-FLASH-RAM 4Mbit
SDA
SCL
ADDRESS
DATA
CONTROL
1001 6MHz
B5C OTC-FLASH
(OCTAL BUS TRANSCEIVER)
7018 74LVC245APW
7019 74LVC245APW
AUXILIARY FLASH PROGRAM CIRCUIT FOR FLASH RAM
1404 SSS5811
SWITCH FOR SOFTWARE DOWNLOAD
E TOP CONTROL
BLACKLIGHT-TC
KEYBOARD
0345
ON / OFF
CHANNEL+
CHANNEL-
VOLUME+
VOLUME-
MENU
J LED + SWITCH
7030 7031 7032
CONTROL
6061
6060 BLUE
6051 RED
1040 IR SENSOR
7070 LM358P
6070
LIGHT SENSOR
1M20
LED1
RC-IN
LIGHT-SENSOR
+8V
LED2
+5V2-STBY
SCL-S
SDA-S
KEYBOARD
CON-SND
LED1
RC
LIGHT_SENSOR
5Y11
9Y06
SCL-SF
SDA-SF
B14E
9ID0
AL AMBI LIGHT
TO 1M49 B21
See also block diagram I2C
TO 2nd AMBI LIGHT PWB (Optional)
1M49
1M48
7001 P87LPC760
MICRO CONTROLLER
SCL
SDA
RXD
7018 7009
7019 7010
7020 7011
7015
7016
7017
5014
5015
5016
1M11
1M12
RED
BLUE
GREEN

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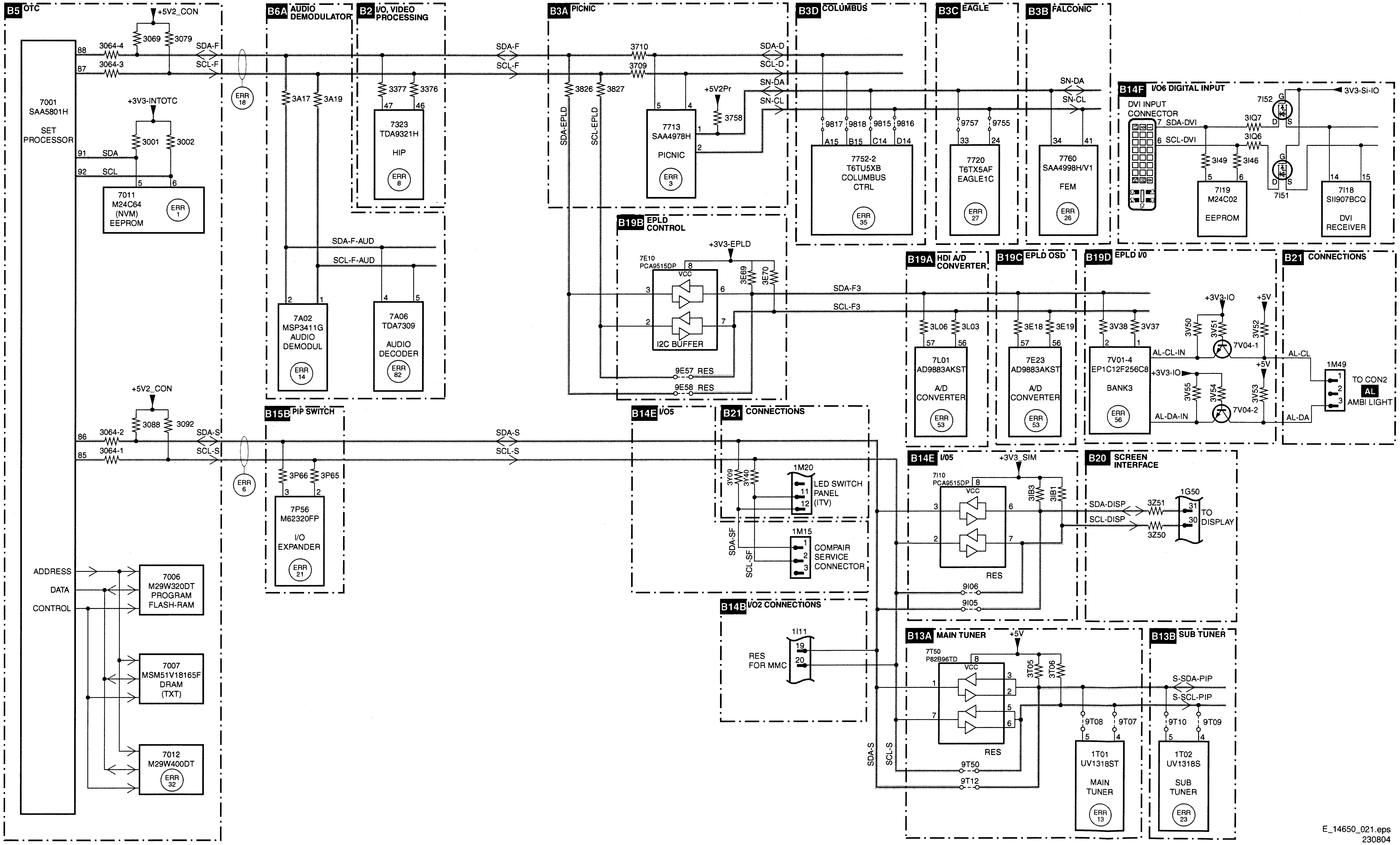
I2C IC's overview

IIC

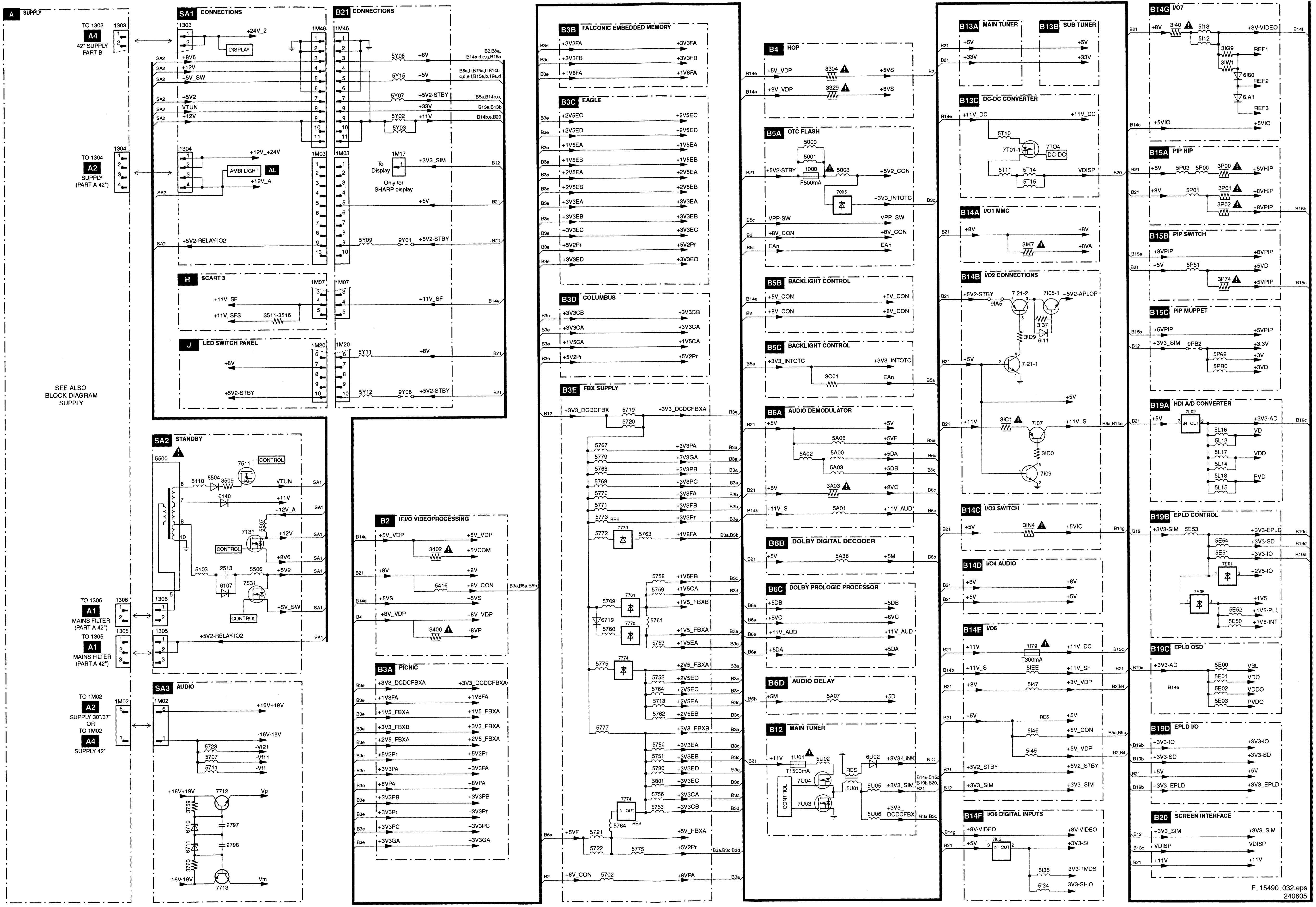


B5 OTC
7001
SAA5801H
SET PROCESSOR
+5V2_CON
3069
3079
3064-4
3064-3
SDA-F
SCL-F
ERR 18
+3V3-INTOTC
3001
3002
SDA
SCL
7011
M24C64
(NVM)
EEPROM
ERR 1
+5V2_CON
3088
3092
3064-2
3064-1
SDA-S
SCL-S
ERR 6
ADDRESS
DATA
CONTROL
7006
M29W320DT
PROGRAM
FLASH-RAM
7007
MSM51V18165F
DRAM
(TXT)
7012
M29W400DT
ERR 32
B6A AUDIO DEMODULATOR
3A17
3A19
SDA-F-AUD
SCL-F-AUD
7A02
MSP3411G
AUDIO
DEMODUL
ERR 14
B2 I/O, VIDEO PROCESSING
3377
3376
7323
TDA9321H
HIP
ERR 8
7A06
TDA7309
AUDIO
DECODER
ERR 82
B15B PIP SWITCH
3P66
3P65
7P56
M62320FP
I/O
EXPANDER
ERR 21
B3A PICNIC
3710
3709
SDA-D
SCL-D
SN-DA
SN-CL
+5V2Pr
3758
3826
3827
SDA-EPLD
SCL-EPLD
7713
SAA4978H
PICNIC
ERR 3
B19B EPLD CONTROL
+3V3-EPLD
7E10
PCA9515DP
VCC
3E69
3E70
I2C BUFFER
9E57 RES
9E58 RES
SDA-F3
SCL-F3
B3D COLUMBUS
9817
9818
9815
9816
7752-2
T6TU5XB
COLUMBUS
CTRL
ERR 35
B3C EAGLE
9757
9755
7720
T6TX5AF
EAGLE1C
ERR 27
B3B FALCONIC
7760
SAA4998H/V1
FEM
ERR 26
B14F I/O6 DIGITAL INPUT
3V3-Si-IO
DVI INPUT CONNECTOR
SDA-DVI
SCL-DVI
7I52
7I51
3I07
3I06
3I49
3I46
7I19
M24C02
EEPROM
7I18
SII907BCQ
DVI
RECEIVER
B19A HDI A/D CONVERTER
3L06
3L03
7L01
AD9883AKST
A/D
CONVERTER
ERR 53
B19C EPLD OSD
3E18
3E19
7E23
AD9883AKST
A/D
CONVERTER
ERR 53
B19D EPLD I/O
3V38
3V37
+3V3-IO
+5V
3V50
3V51
3V52
3V55
3V54
3V53
7V04-1
7V04-2
7V01-4
EP1C12F256C8
BANK3
ERR 56
AL-CL-IN
AL-DA-IN
B21 CONNECTIONS
AL-CL
AL-DA
1M49
TO CON2
AL
AMBI LIGHT
B14E I/O5
B21 CONNECTIONS
3Y09
3Y40
1M20
LED SWITCH PANEL
(ITV)
1M15
COMPAIR
SERVICE
CONNECTOR
SDA-SF
SCL-SF
B14E I/O5
+3V3_SIM
7I10
PCA9515DP
3IB3
3IB1
RES
9I06
9I05
B20 SCREEN INTERFACE
SDA-DISP
SCL-DISP
3Z51
3Z50
1G50
TO DISPLAY
B14B I/O2 CONNECTIONS
1I11
RES FOR MMC
B13A MAIN TUNER
+5V
7T50
P82B96TD
3T05
3T06
RES
9T50
9T12
9T08
9T07
1T01
UV1318ST
MAIN
TUNER
ERR 13
B13B SUB TUNER
S-SDA-PIP
S-SCL-PIP
9T10
9T09
1T02
UV1318S
SUB
TUNER
ERR 23

E_14650_021.eps
230804

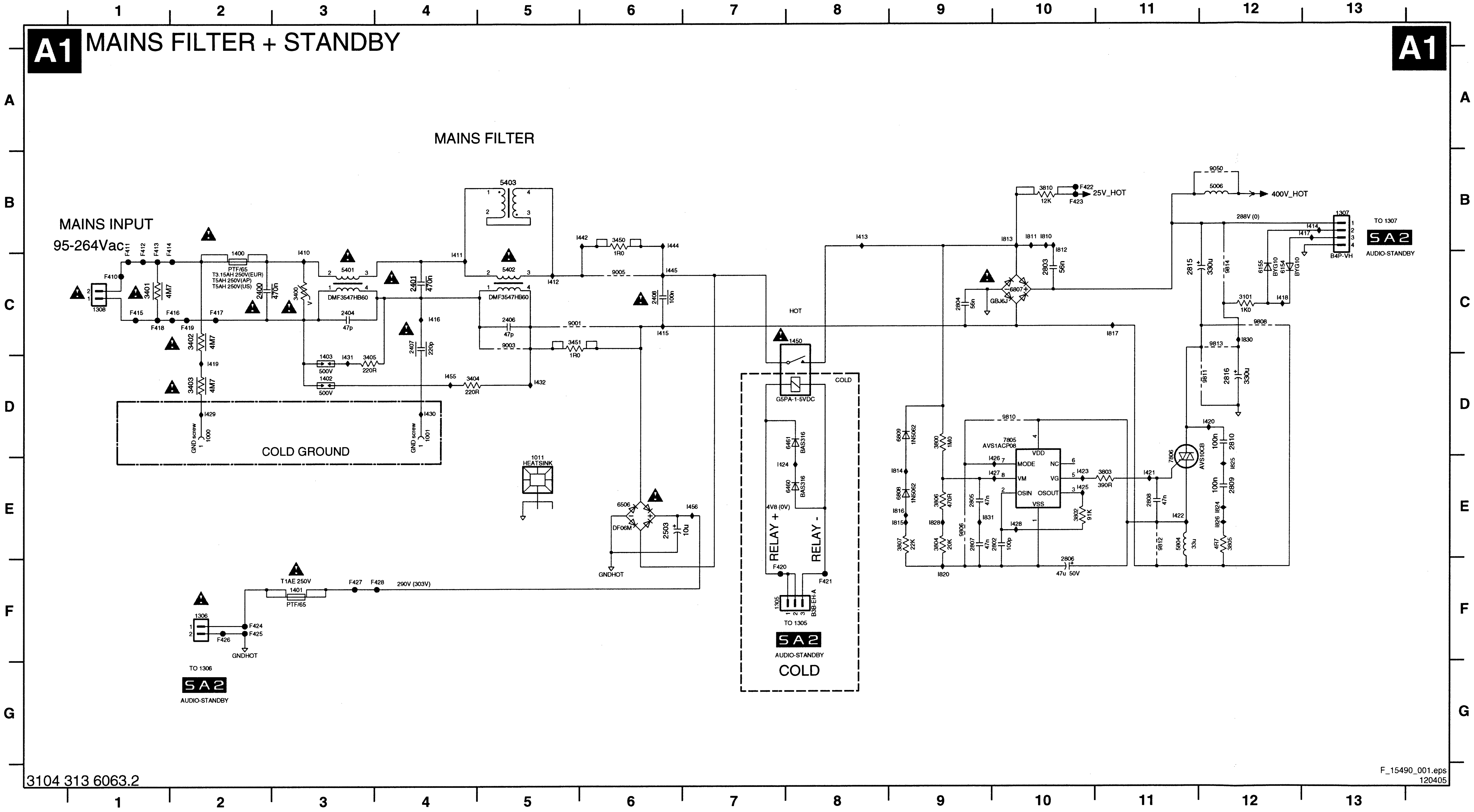
Supply Lines Overview

SUPPLY LINES OVERVIEW


A SUPPLY
SEE ALSO BLOCK DIAGRAM SUPPLY
TO 1303 A4 42" SUPPLY PART B
TO 1304 A2 SUPPLY (PART A 42")
TO 1306 A1 MAINS FILTER (PART A 42")
TO 1305 A1 MAINS FILTER (PART A 42")
TO 1M02 A2 SUPPLY 30"/37" OR TO 1M02 A4 SUPPLY 42"
SA1 CONNECTIONS
B21 CONNECTIONS
H SCART 3
J LED SWITCH PANEL
SA2 STANDBY
SA3 AUDIO
B2 IF,I/O VIDEOPROCESSING
B3A PICNIC
B3B FALCONIC EMBEDDED MEMORY
B3C EAGLE
B3D COLUMBUS
B3E FBX SUPPLY
B4 HOP
B5A OTC FLASH
B5B BACKLIGHT CONTROL
B5C BACKLIGHT CONTROL
B6A AUDIO DEMODULATOR
B6B DOLBY DIGITAL DECODER
B6C DOLBY PROLOGIC PROCESSOR
B6D AUDIO DELAY
B12 MAIN TUNER
B13A MAIN TUNER
B13B SUB TUNER
B13C DC-DC CONVERTER
B14A I/O1 MMC
B14B I/O2 CONNECTIONS
B14C I/O3 SWITCH
B14D I/O4 AUDIO
B14E I/O5
B14F I/O6 DIGITAL INPUTS
B14G I/O7
B15A PIP HIP
B15B PIP SWITCH
B15C PIP MUPPET
B19A HDI A/D CONVERTER
B19B EPLD CONTROL
B19C EPLD OSD
B19D EPLD I/O
B20 SCREEN INTERFACE
DISPLAY
AMBI LIGHT AL
To Display Only for SHARP display
CONTROL
DC-DC
+24V_2
+8V6
+12V
+5V_SW
+5V2
VTUN
+12V_+24V
+12V_A
+5V2-RELAY-IO2
+8V
+33V
+11V
+5V2-STBY
+3V3_SIM
+5V
+11V_SF
+11V_SFS
+16V+19V
-16V-19V
Vp
Vm
+5V_VDP
+5VCOM
+8V_CON
+5VS
+8V_VDP
+8VP
+3V3_DCDCFBX
+3V3_DCDCFBXA
+1V8FA
+1V5_FBXA
+3V3_FBXB
+2V5_FBXA
+5V2Pr
+5VF
+8V_CON
+8VPA
+5VS
+8VS
+5V2_CON
+3V3_INTOTC
VPP-SW
EAn
+5V_CON
+5DA
+5DB
+8VC
+11V_AUD
+5M
+5D
+3V3-LINK
+3V3_SIM
+11V_DC
VDISP
+5V2-APLOP
+11V_S
+5VIO
+8V-VIDEO
+3V3-SI
3V3-TMDS
3V3-SI-IO
REF1
REF2
REF3
+5VHIP
+8VHIP
+8VPIP
+5VPIP
+5VD
+3V3-AD
VD
VDD
PVD
+3V3-EPLD
+3V3-SD
+3V3-IO
+2V5-IO
+1V5
+1V5-PLL
+1V5-INT
VBL
VDO
VDDO
PVDO
+3V3_EPLD
F_15490_032.eps
240605

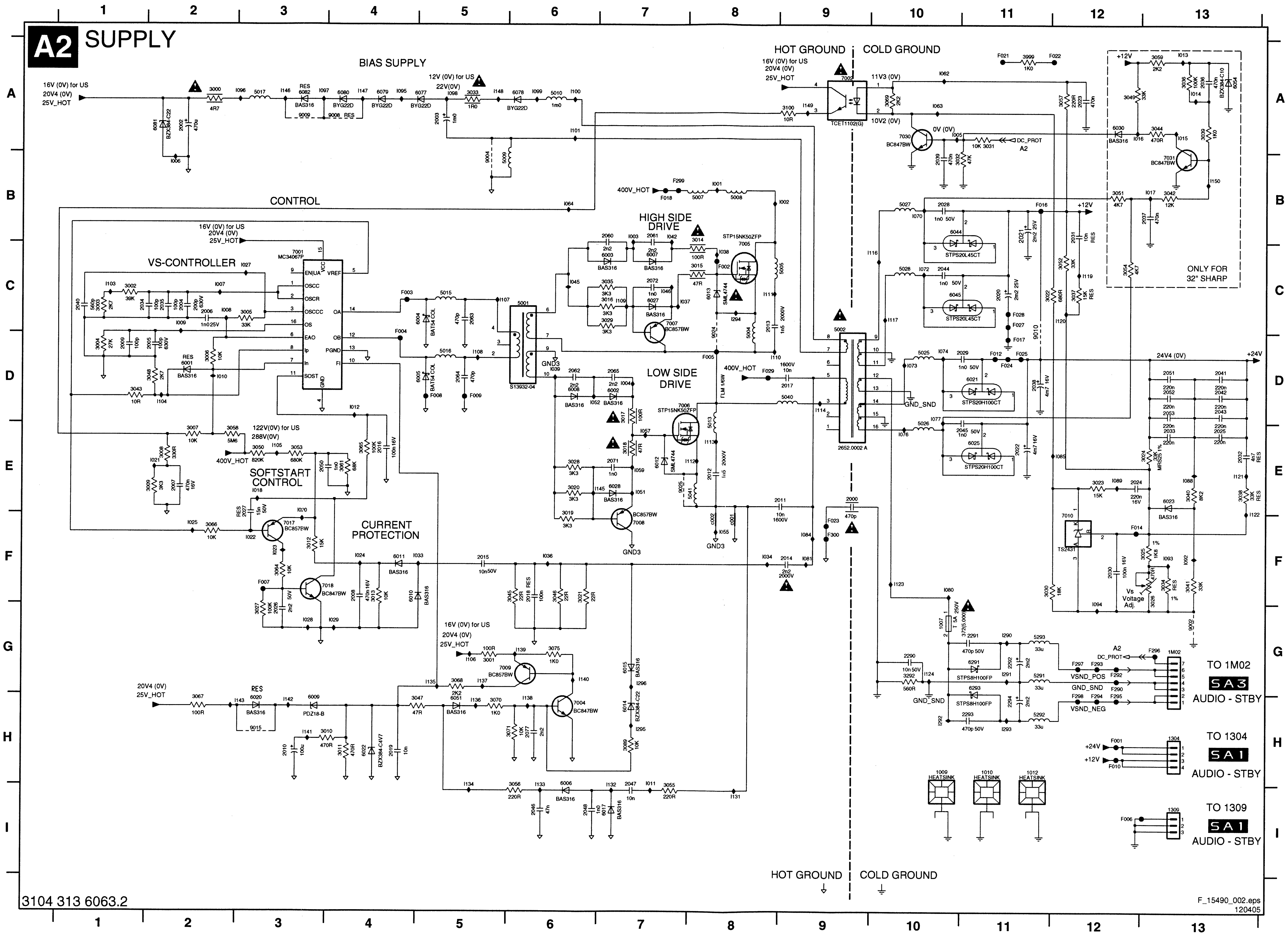
7. Circuit Diagrams and PWB Layouts

LCD Supply Panel: Mains Filter + Standby


A1 MAINS FILTER + STANDBY
A1
MAINS FILTER
MAINS INPUT
95-264Vac
1308
F410
F411
F412
F413
F414
1400
PTF/65
T3.15AH 250V(EUR)
T5AH 250V(AP)
T5AH 250V(US)
3401 4M7
3402 4M7
3403 4M7
2400 470n
3400
5401
DMF3547HB60
2404 47p
5403
5402
DMF3547HB60
2401 470n
2406 47p
2407 220p
2408 100n
3450 1R0
3451 1R0
9001
9003
9005
1403 500V
1402 500V
3405 220R
3404 220R
COLD GROUND
GND screw 1000
GND screw 1001
1011 HEATSINK
6506 DF06M
2503 10u
GNDHOT
T1AE 250V
1401 PTF/65
F427
F428
290V (303V)
1306
F424
F425
F426
TO 1306
SA2
AUDIO-STANDBY
HOT
COLD
1450
G5PA-1-5VDC
6461 BAS316
6460 BAS316
4V8 (0V)
RELAY +
RELAY -
F420
F421
1305
B3B-EH-A
TO 1305
SA2
AUDIO-STANDBY
COLD
3810 12K
F422
F423
25V_HOT
2803 56n
2804 56n
GBJ6J
6807
6809 1N5062
6808 1N5062
3800 1M0
3806 470R
3804 22K
3807 22K
2805 47n
2807 47n
2802 100p
9806
9810
7805 AVS1ACP08
VDD
MODE
VM
OSIN
OSOUT
VSS
NC
VG
3803 390R
3802 91K
2806 47u 50V
2808 47n
9812
5804 33u
7806 AVS10CB
2810 100n
2809 100n
3805 4R7
9050
5006
400V_HOT
288V (0)
2815 330u
9814
6155 BYG10
6154 BYG10
3101 1K0
9808
9813
9811
2816 330u
1307
B4P-VH
TO 1307
SA2
AUDIO-STANDBY
3104 313 6063.2
F_15490_001.eps
120405

1000	D2
1001	D4
1011	E5
1305	F7
1306	F2
1307	B13
1308	C1
1400	C2
1401	F3
1402	D3
1403	D3
1450	C8
2400	C2
2401	C4
2404	C3
2406	C5
2407	C4
2408	C6
2503	E6
2802	E10
2803	C10
2804	C9
2805	E9
2806	F10
2807	E9
2808	E11
2809	E12
2810	D12
2815	C11
2816	D12
3101	C12
3400	C3
3401	C1
3402	C2
3403	D2
3404	D4
3405	D3
3450	B6
3451	C5
3800	D9
3802	E10
3803	E11
3804	E9
3805	E12
3806	E9
3807	E9
3810	B10
5006	B12
5401	C3
5402	C5
5403	B5
5804	E11
6154	C12
6155	C12
6460	E8
6461	D8
6506	E6
6807	C10
6808	E9
6809	D9
7805	D10
7806	E11
9001	C5
9003	C5
9005	C6
9050	B12
9806	E9
9808	C12
9810	D10
9811	D12
9812	E11
9813	C12
9814	C12
F410	C1
F411	B1
F412	B1
F413	B1
F414	B1
F415	C1
F416	C2
F417	C2
F418	C1
F419	C2
F420	F7
F421	F8
F422	B10
F423	B10
F424	F2
F425	F2
F426	F2
F427	F3
F428	F4
I410	B3
I411	C4
I412	C5
I413	B8
I414	B13
I415	C6
I416	C4
I417	B13
I418	C12
I419	D2
I420	D12
I421	E11
I422	E11
I423	E10
I424	E7
I425	E10
I426	E10
I427	E10
I428	E10
I429	D2
I430	D4
I431	D3
I432	D5
I442	B6
I444	B6
I445	C6
I455	D4
I456	E7
I810	B10
I811	B10
I812	B10
I813	B10
I814	E9
I815	E9
I816	E9
I817	C11
I820	F9
I824	E12
I825	E12
I826	E12
I828	E9
I830	C12
I831	E9

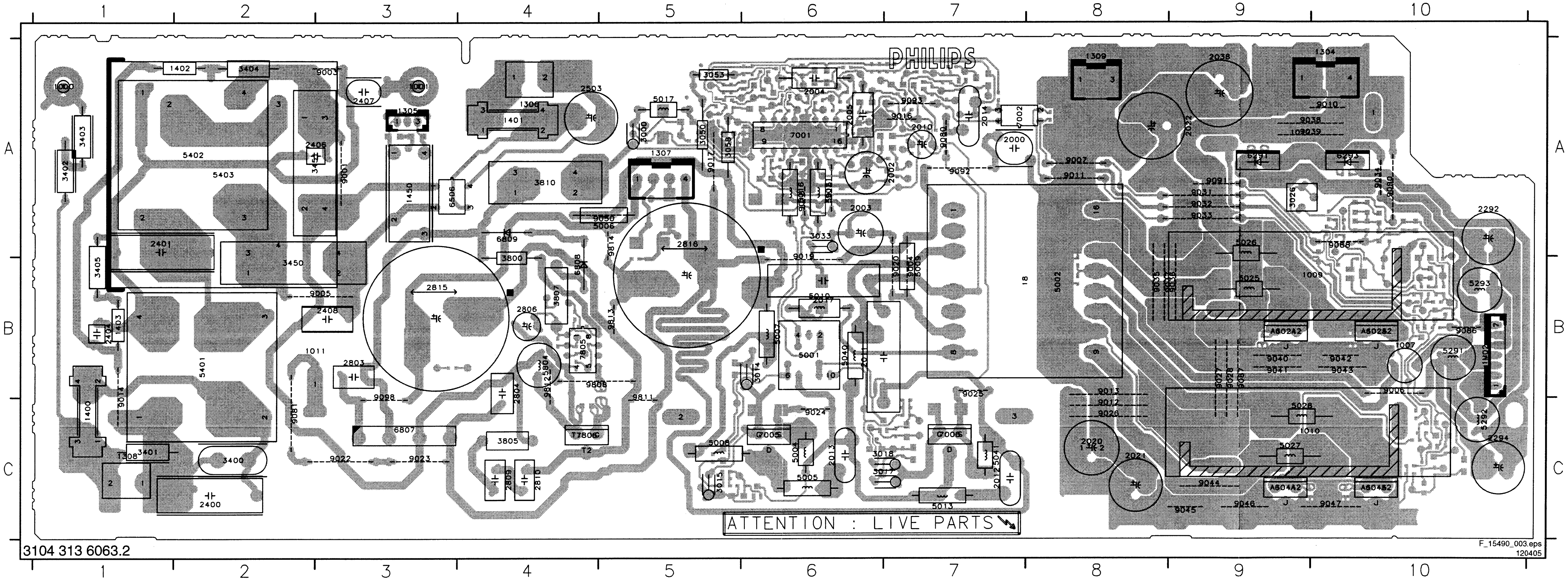
LCD Supply Panel: Supply


A2 SUPPLY
BIAS SUPPLY
CONTROL
VS-CONTROLLER
MC34067P
SOFTSTART CONTROL
CURRENT PROTECTION
HIGH SIDE DRIVE
LOW SIDE DRIVE
STP15NK50ZFP
BC857BW
BC847BW
S13932-04
2652.0002 A
TCET1102(G)
HOT GROUND
COLD GROUND
16V (0V) for US
20V4 (0V)
25V_HOT
12V (0V) for US
22V(0V)
400V_HOT
122V(0V) for US
288V(0V)
11V3 (0V)
10V2 (0V)
0V (0V)
DC_PROT
+12V
24V4 (0V)
+24V
GND_SND
GND3
ONLY FOR 32" SHARP
STPS20L45CT
STPS20H100CT
STPS8H100FP
TS2431
Vs Voltage Adj.
VSND_POS
VSND_NEG
TO 1M02
SA3
AUDIO - STBY
TO 1304
SA1
AUDIO - STBY
TO 1309
SA1
AUDIO - STBY
+24V
+12V
HEATSINK
1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H I
3104 313 6063.2
F_15490_002.eps
120405

1007	G10
1009	H10
1010	H11
1012	H11
1304	H13
1309	I13
1M02	G13
2000	E9
2002	A2
2003	A5
2004	C2
2005	D2
2006	C2
2007	E2
2008	F4
2009	D1
2010	H3
2011	E9
2012	E8
2013	C8
2014	F9
2015	F5
2016	E4
2017	D9
2018	F6
2019	H4
2020	C11
2021	B11
2022	E11
2023	A12
2024	E12
2025	E13
2026	G3
2027	E3
2028	B10
2029	D11
2030	F12
2031	B12
2032	E13
2033	E13
2034	C1
2035	C2
2036	A13
2037	B13
2038	D11
2039	B10
2040	C1
2041	D13
2042	D13
2043	D13
2044	C10
2045	E11
2046	I6
2047	I7
2048	I6
2050	E3
2051	D13
2052	D13
2053	D13
2060	C6
2061	B7
2062	D6
2063	C5
2064	D5
2065	D7
2071	E7
2072	C7
2077	H6
2290	G10
2291	G11
2292	G11
2293	H11
2294	H11
3000	A2
3001	G5
3002	C1
3003	C1
3004	D1
3005	C3
3006	D2
3007	E2
3008	E2
3009	E2
3010	H4
3011	H4
3012	F3
3013	F4
3014	B7
3015	C7
3016	C7
3017	D7
3018	E7
3019	F6
3020	E6
3021	F6
3022	C11
3023	E12
3024	E13
3025	F13
3026	G13
3027	G3
3028	E6
3029	C7
3030	F11
3031	A11
3032	B10
3033	A5
3034	F13
3035	C7
3036	A13
3037	C12
3038	E13
3039	A13
3040	E13
3041	F13
3042	B13
3043	D1
3044	A13
3045	F6
3046	F6
3047	H5
3048	D2
3049	A12
3050	E3
3051	B12
3052	C12
3053	E3
3054	C12
3055	I7
3056	I6
3057	A12
3058	E2
3059	A13
3061	E4
3064	F3
3065	E4
3066	F2
3067	H2
3068	G5
3069	A10
3070	H5
3071	H6
3075	G6
3089	H7
3100	A9
3292	G10
3999	A11
5001	C6
5002	C9
5004	C8
5005	C9
5007	B8
5008	B8
5009	B5
5010	A6
5013	D8
5015	C5
5016	D5
5017	A3
5025	D10
5026	E10
5027	B10
5028	C10
5040	D9
5041	E8
5291	G11
5292	H11
5293	G11
6001	D2
6002	D7
6003	C6
6004	C5
6005	D5
6006	I6
6007	C7
6008	D6
6009	H3
6010	F4
6011	F4
6012	E7
6013	C8
6014	H7
6015	G7
6017	I7
6020	H3
6021	D11
6022	H4
6023	E13
6025	E11
6027	C7
6028	E7
6030	A12
6044	B10
6045	C10
6051	H5
6054	A13
6077	A5
6078	A6
6079	A4
6080	A4
6081	A2
6082	A3
6291	G11
6293	G11
7001	C3
7002	A9
7004	H6
7005	C8
7006	D7
7007	C7
7008	F7
7009	G6
7010	E12
7017	F3
7018	F3
7030	A10
7031	B13
9002	G13
9004	B5
9008	A4
9009	A3
9010	C11
9015	H3
9024	C8
9025	E7
F001	H12
F002	C8
F003	C4
F004	D4
F005	D8
F006	I12
F007	F3
F008	D5
F009	D5
F010	H12
F012	D11
F014	F12
F016	B11
F017	D11
F018	B7
F021	A11
F022	A12
F023	F9
F024	D11
F025	D11
F027	C11
F028	C11
F029	D8
F290	G12
F292	G12
F293	G12
F294	H12
F295	H12
F296	G13
F297	G12
F298	H12
F299	B7
F300	F9
I001	B8
I002	B9
I003	B6
I004	D7
I005	A10
I006	B2
I007	C2
I008	C2
I009	C2
I010	D2
I011	H7
I012	D4
I013	A13
I014	A13
I015	A13
I016	A12
I017	B13
I018	E3
I020	E3
I021	E2
I022	F3
I023	F3
I024	F4
I025	F2
I027	C3
I028	G3
I029	G4
I033	F5
I034	F8
I036	F6
I037	C7
I038	B8
I039	D6
I042	B7
I045	C6
I046	C7
I051	E7
I052	D6
I055	F8
I057	E7
I059	E7
I062	A10
I063	A10
I064	B6
I070	B10
I072	C10
I073	D10
I074	D10
I076	E10
I077	D10
I080	F10
I081	F9
I084	F9
I085	E12
I088	E13
I089	E12
I092	F13
I093	F13
I094	F12
I095	A4
I096	A3
I097	A3
I098	A5
I099	A6
I100	A6
I101	A6
I103	C1
I104	D2
I105	E3
I106	G5
I107	C5
I108	D5
I109	C7
I110	D8
I111	C8
I112	E8
I113	E8
I114	D9
I116	C10
I117	C10
I119	C12
I120	C12
I121	E13
I122	E13
I123	F10
I124	G10
I131	I8
I132	I7
I133	I6
I134	I5
I135	G5
I136	H5
I137	G5
I138	H6
I139	G6
I140	G6
I141	H3
I142	H3
I143	H3
I145	E7
I146	A3
I147	A4
I148	A5
I149	A9
I150	B13
I290	G11
I291	G11
I292	H10
I293	H11
I294	C8
I295	H7
I296	G7
c001	F8
c002	F8

Layout LCD Supply Panel (Top Side)

1000	A1
1001	A3
1007	B10
1009	B9
1010	C9
1011	C3
1012	A9
1304	A10
1305	A3
1306	A4
1307	A5
1308	C1
1309	A8
1400	C1
1401	A4
1402	A2
1403	B1
1450	A3
1M02	B10
2000	A7
2002	A7
2003	A6
2004	A6
2005	A6
2010	A7
2011	B7
2012	C7
2013	C6
2014	A7
2017	B6
2020	C8
2021	C8
2022	A8
2038	A9
2292	A10
2294	C10
2400	C2
2401	B1
2404	B1
2406	A3
2407	A3
2408	B3
2503	A4
2803	B3
2804	B4
2806	B4
2809	C4
2810	C4
2815	A3
2816	A6
3000	A5
3014	B6
3015	C5
3017	C7
3018	C7
3026	A9
3033	A6
3050	A5
3053	A5
3058	A5
3400	C2
3401	C2
3402	A1
3403	A1
3404	A2
3405	B1
3450	A2
3451	A2
3800	A4
3805	C4
3807	B4
3810	A4
5001	B6
5002	A7
5004	C6
5005	C6
5006	A4
5007	B6
5008	C5
5009	B7
5010	B6
5013	C7
5015	A6
5016	A6
5017	A5
5025	B9
5026	A9
5027	C9
5028	C9
5040	B6
5041	C7
5291	B10
5292	C10
5293	B10
5401	B2
5402	A1
5403	A2
5804	B4
6021	B9
6025	B10
6044	C10
6045	C10
6291	A9
6293	A10
6506	A4
6807	C3
6808	A4
6809	A4
7001	A6
7002	A7
7005	C6
7006	C7
7805	B4
7806	C4
9001	A3
9003	A3
9004	A7
9005	B3
9006	C10
9007	A8
9010	A10
9011	A8
9012	C8
9013	B8
9014	B1
9016	A7
9017	A5
9018	A6
9019	A6
9020	B7
9021	A6
9022	C3
9023	C3
9024	C6
9025	B7
9026	C8
9027	B9
9028	B9
9031	A9
9032	A9
9033	A9
9034	A10
9035	B8
9036	B9
9037	B8
9038	A9
9039	A9
9040	B9
9041	B9
9042	B10
9043	B10
9044	C9
9045	C9
9046	C9
9047	C10
9050	A5
9080	A7
9081	C2
9086	B10
9087	B9
9088	A10
9090	A10
9091	A9
9092	A7
9093	A7
9098	B3
9808	B5
9811	B5
9812	C4
9813	B5
9814	A5

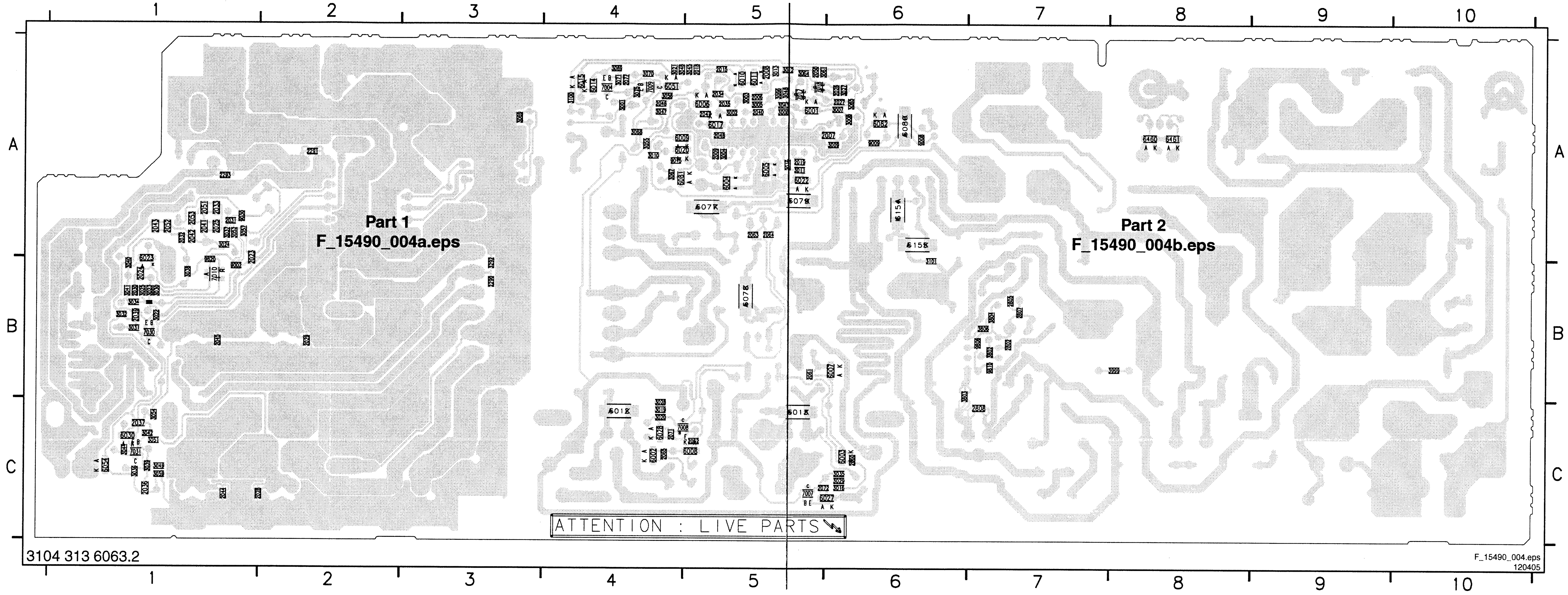


Layout LCD Supply Panel (Bottom Side)

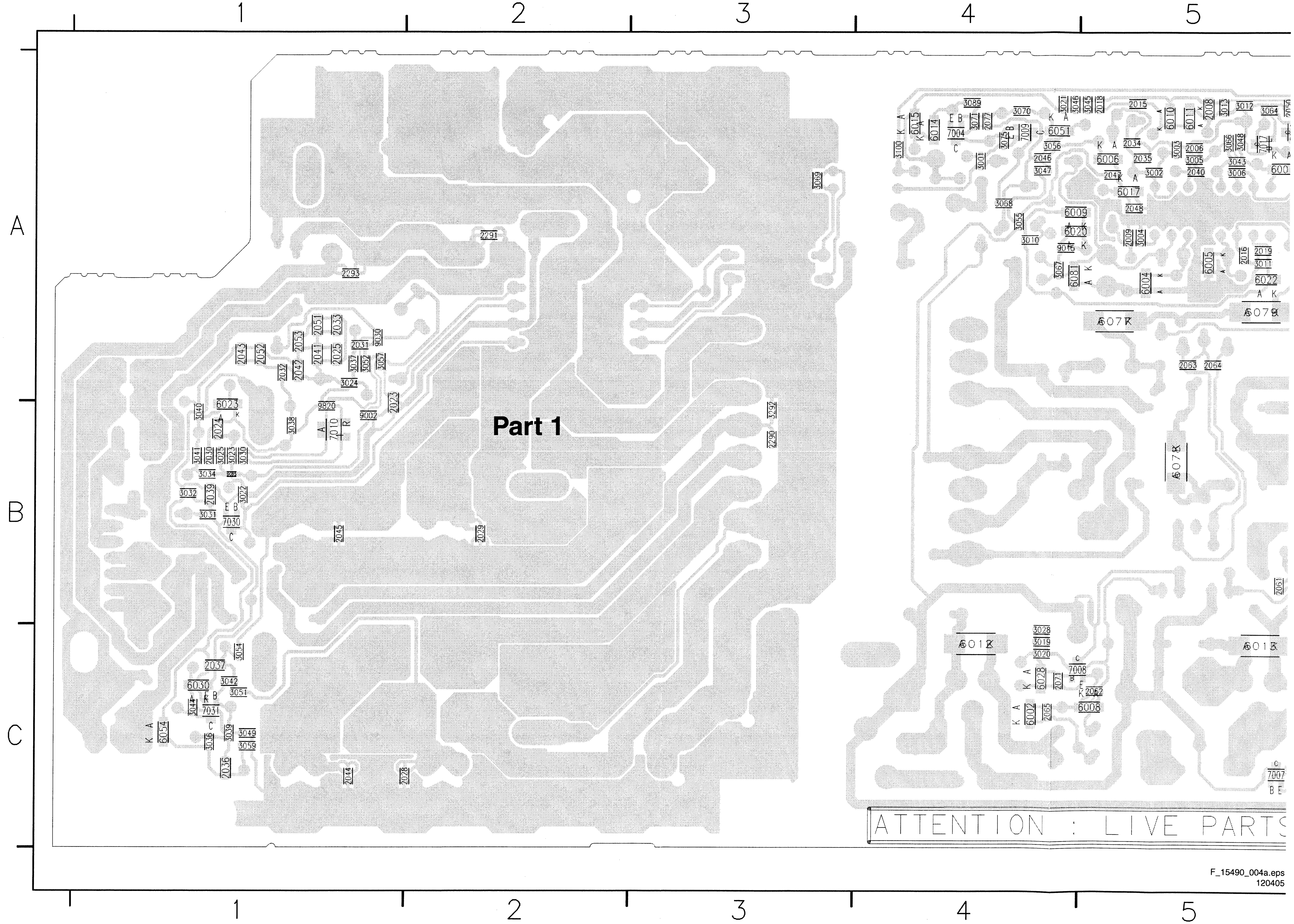
2006	A5	2019	A5	2029	B2	2036	C1	2044	C1	2052	A1	2065	C4	2802	B7	3004	A5
2007	A6	2023	B1	2030	B1	2037	C1	2045	B1	2053	A1	2071	C4	2805	B7	3005	A5
2008	A5	2024	B1	2031	A1	2039	B1	2046	A4	2060	C6	2072	C5	2807	B7	3006	A5
2009	A5	2025	A1	2032	A1	2040	A5	2047	A5	2061	B5	2077	A4	2808	C7	3007	A6
2015	A5	2026	A6	2033	A1	2041	A1	2048	A5	2062	C5	2290	B3	3001	A4	3008	A6
2016	A5	2027	A6	2034	A5	2042	A1	2050	A5	2063	A5	2291	A2	3002	A5	3009	A6
2018	A5	2028	C2	2035	A5	2043	A1	2051	A1	2064	A5	2293	A1	3003	A5	3010	A4

3011	A5	3022	B1	3030	B1	3038	B1	3045	A5	3054	C1	3065	A6	3075	A4
3012	A5	3023	B1	3031	B1	3039	C1	3046	A4	3055	A4	3066	A5	3089	A4
3013	A5	3024	A1	3032	B1	3040	B1	3047	A4	3056	A4	3067	A4	3100	A4
3016	C6	3025	B1	3034	B1	3041	B1	3048	A5	3057	A1	3068	A4	3101	B6
3019	C4	3027	A6	3035	C6	3042	C1	3049	C1	3059	C1	3069	A3	3292	B3
3020	C4	3028	C4	3036	C1	3043	A5	3051	C1	3061	A5	3070	A4	3802	B7
3021	A4	3029	C6	3037	A1	3044	C1	3052	A1	3064	A5	3071	A4	3803	B6

3804	B7	6005	A5	6012	B4	6023	A1	6078	B5	6460	A8	7017	A5	9015	A4
3806	B7	6006	A5	6013	C5	6027	C6	6079	A5	6461	A8	7018	A5	9030	A1
3999	B8	6007	B6	6014	A4	6028	C4	6080	A6	7004	A4	7030	B1	9085	B1
6001	A5	6008	C5	6015	A4	6030	C1	6081	A4	7007	C5	7031	C1	9806	B7
6002	C4	6009	A4	6017	A5	6051	A4	6082	A6	7008	C4	9002	B1	9810	B7
6003	C6	6010	A5	6020	A4	6054	C1	6154	A6	7009	A4	9008	A6	9820	B1
6004	A5	6011	A5	6022	A5	6077	A5	6155	B6	7010	B1	9009	A6		

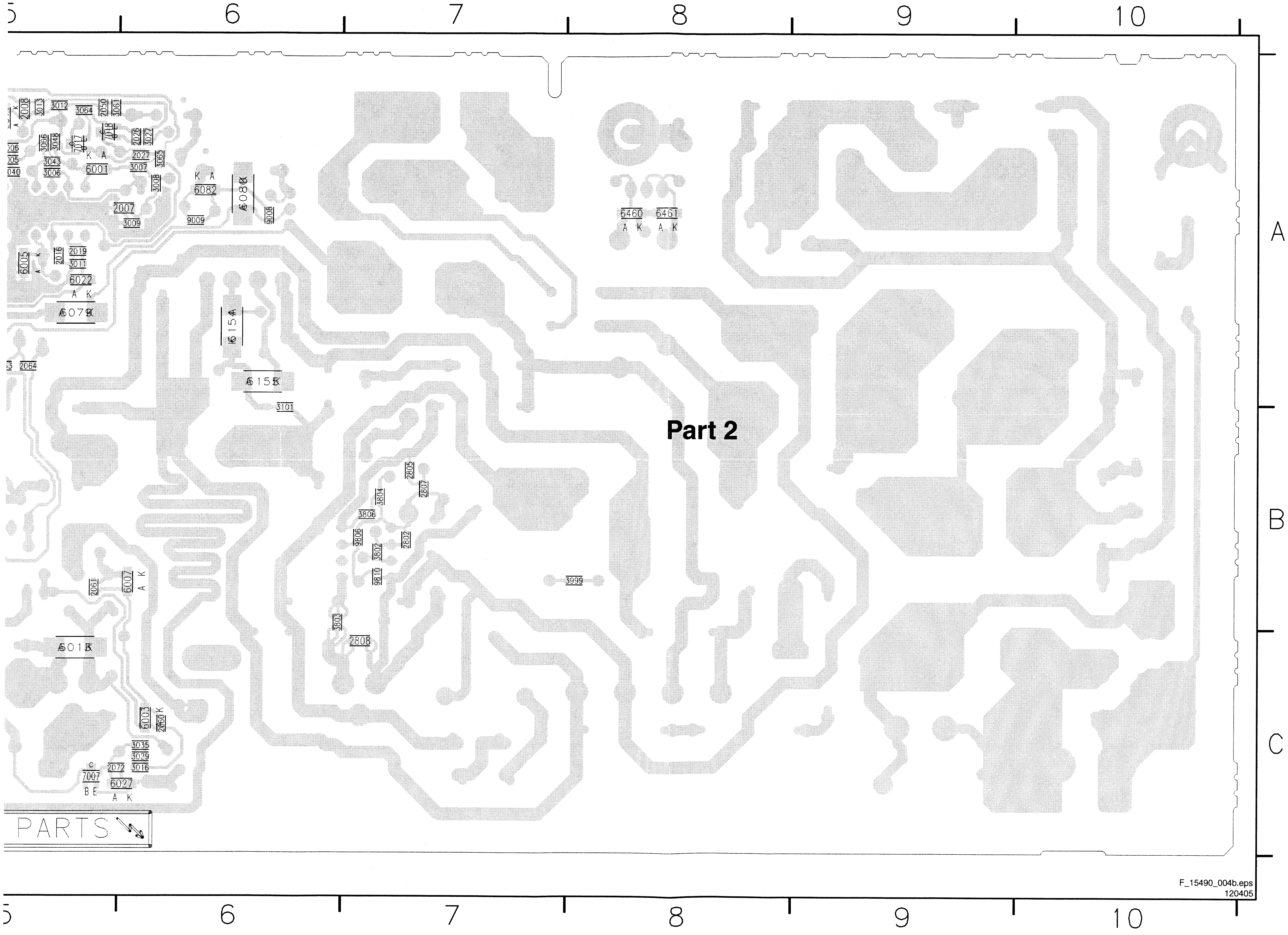


Layout LCD Supply Panel (Part 1 Bottom Side)


1
2
3
4
5
A
B
C
Part 1
ATTENTION : LIVE PARTS
2291
2293
3069
2043
2052
2032
2053
2047
2051
2041
2033
2025
2031
3037
3052
9030
3057
3024
2023
6023
3040
2024
3038
9820
7010
9002
3041
2030
3025
3023
3030
3034
3032
2039
3022
3031
7030
2045
2029
3292
2290
3054
2037
6030
3042
3051
3044
7031
6054
3036
3039
3049
3059
2036
2044
2028
3100
6015
6014
7004
3089
3071
2077
3001
3070
3075
7009
6051
3056
2046
3047
3021
3046
3045
2018
2015
6010
6011
2008
3013
3012
3064
2034
6006
2035
2042
6017
3002
3003
2006
3005
2040
3066
3048
7017
3043
3006
3068
3055
3010
6009
6020
9016
2048
2009
3004
3067
6081
6004
6005
2016
2019
3011
6022
6077
6079
2063
2064
6078
2061
6012
3028
3019
3020
7008
6028
2071
2062
6008
6002
2065
6013
7007

F_15490_004a.eps
120405

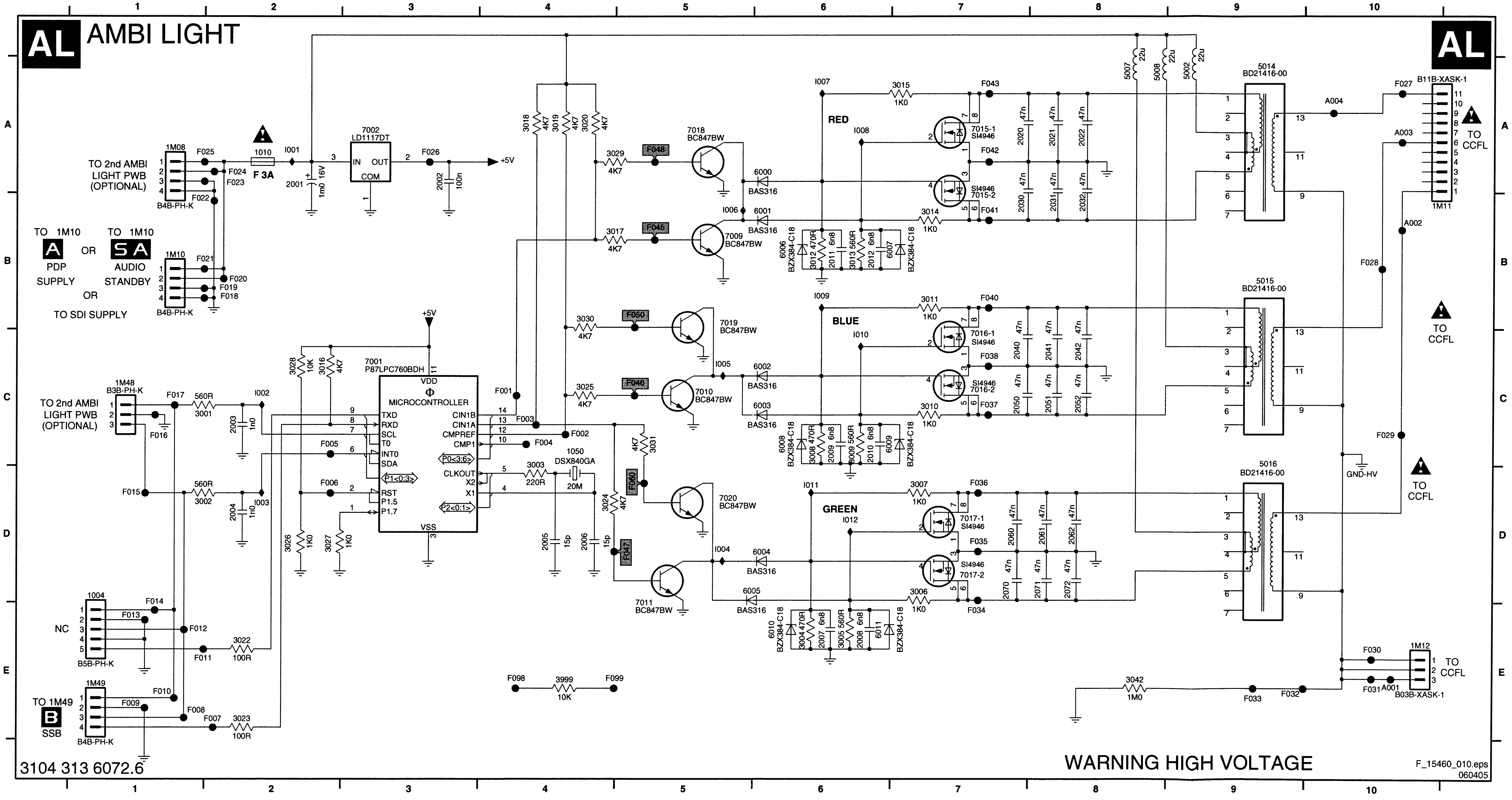
Layout LCD Supply Panel (Part 2 Bottom Side)


6
7
8
9
10
A
B
C
2008
3013
3012
3064
2050
3061
3066
3048
7017
7018
2026
3027
2027
3065
3043
3006
6001
3007
3008
K A
6082
6080
9009
9008
2007
3009
6460
6461
A K
A K
6005
2016
2019
3011
6022
A K
6079
6154
2064
6155
3101
Part 2
2805
2807
3804
3806
9806
2802
3802
9810
3999
2061
6007
A K
3803
2808
6013
6003
2060
3035
3029
3016
C
7007
B E
2072
6027
A K
PARTS

F_15490_004b.eps
120405

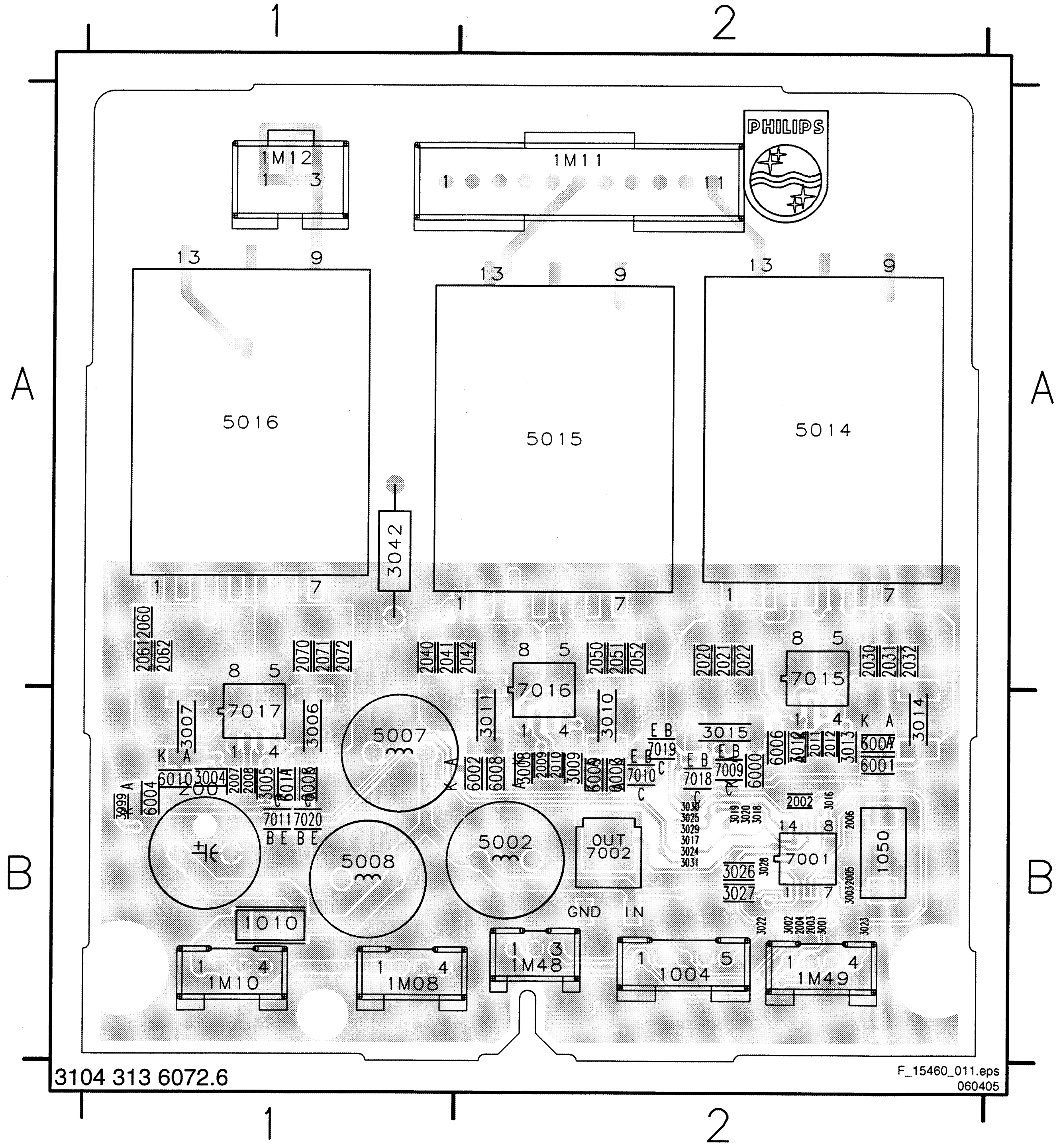
Ambi Light

1004 D1
1010 A2
1050 C4
1M08 A1
1M10 B1
1M11 B10
1M12 E10
1M48 C1
1M49 E1
2001 A2
2002 A3
2003 C2
2004 D2
2005 D4
2006 D4
2007 E6
2008 E6
2009 C6
2010 C6
2011 B6
2012 B6
2020 A7
2021 A8
2022 A8
2030 B7
2031 B8
2032 B8
2040 C7
2041 C8
2042 C8
2050 C7
2051 C8
2052 C8
2060 D7
2061 D8
2062 D8
2070 D7
2071 D8
2072 D8
3001 C1
3002 D1
3003 D4
3004 E6
3005 E6
3006 D7
3007 D7
3008 C6
3009 C6
3010 C7
3011 B7
3012 B6
3013 B6
3014 B7
3015 A7
3016 C2
3017 B4
3018 A4
3019 A4
3020 A4
3022 E2
3023 E2
3024 D4
3025 C4
3026 D2
3027 D2
3028 C2
3029 A4
3030 B4
3031 C5
3042 E8
3999 E4
5002 A9
5007 A8
5008 A8
5014 A9
5015 B9
5016 C9
6000 A6
6001 B6
6002 C6
6003 C6
6004 D6
6005 D5
6006 B6
6007 B6
6008 C6
6009 C6
6010 E6
6011 E6
7001 C3
7002 A3
7009 B5
7010 C5
7011 E5
7015-1 A7
7015-2 A7
7016-1 C7
7016-2 C7
7017-1 D7
7017-2 D7
7018 A5
7019 B5
7020 D5
A001 E10
A002 B10
A003 A10
A004 A10
F001 C4
F002 C4
F003 C4
F004 C4
F005 C2
F006 D2
F007 E2
F008 E1
F009 E1
F010 E1
F011 E1
F012 E1
F013 E1
F014 E1
F015 D1
F016 C1
F017 C1
F018 B2
F019 B2
F020 B2
F021 B1
F022 B1
F023 A2
F024 A2
F025 A1
F026 A3
F027 A10
F028 B10
F029 C10
F030 E10
F031 E10
F032 E9
F033 E9
F034 E7
F035 D7
F036 D7
F037 C7
F038 C7
F040 B7
F041 B7
F042 A7
F043 A7
F045 B5
F046 C5
F047 D5
F048 A5
F050 B5
F060 D5
F098 E4
F099 E4
I001 A2
I002 C2
I003 D2
I004 D5
I005 C5
I006 B5
I007 A6
I008 A6
I009 B6
I010 C6
I011 D6
I012 D6

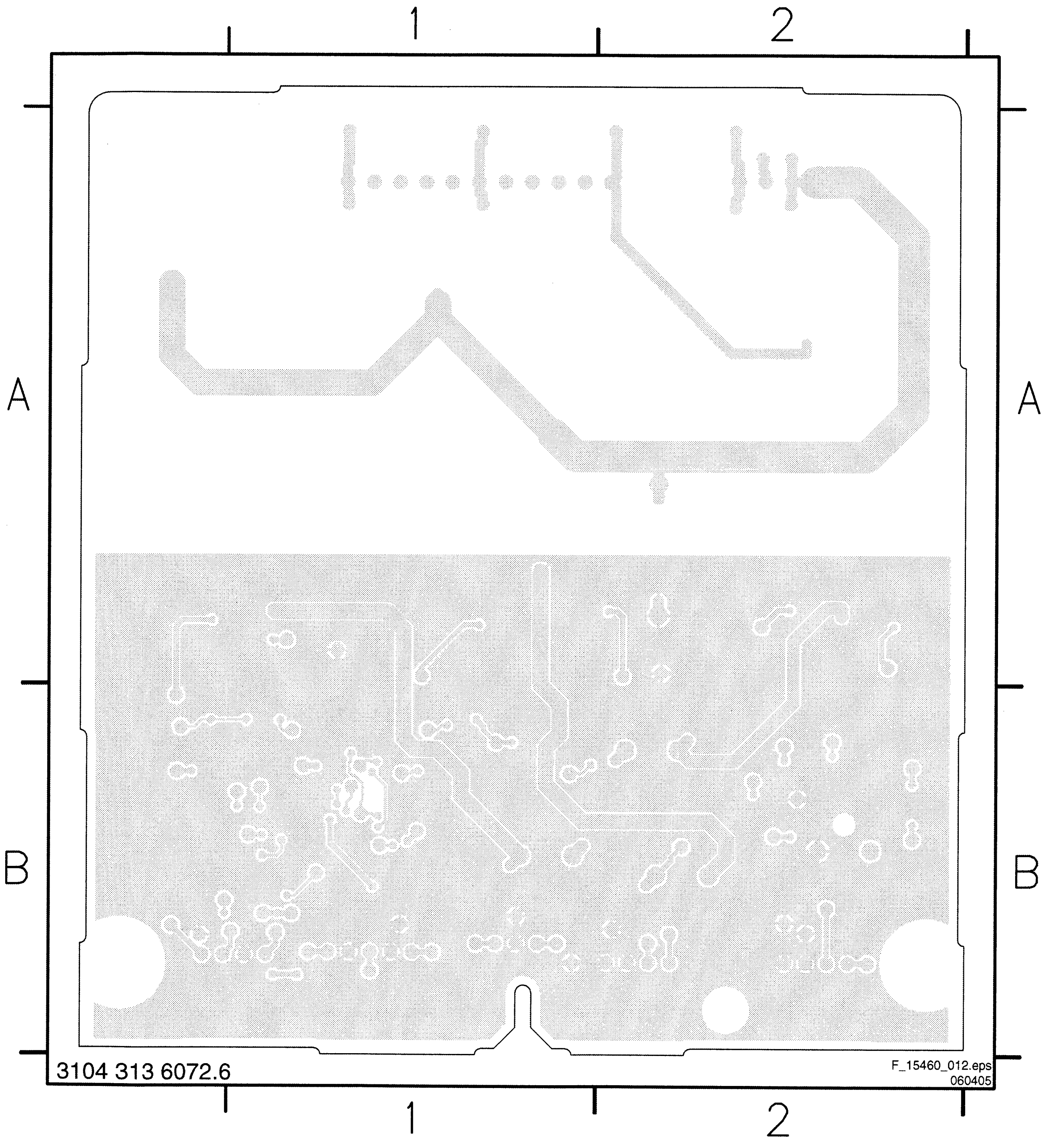

AL
AMBI LIGHT
AL
TO 2nd AMBI LIGHT PWB (OPTIONAL)
1M08
B4B-PH-K
F025
1010
F 3A
I001
7002
LD1117DT
IN
OUT
COM
F026
+5V
2001
1m0 16V
2002
100n
TO 1M10
A
PDP SUPPLY
OR
TO 1M10
SA
AUDIO STANDBY
OR
TO SDI SUPPLY
1M10
B4B-PH-K
F020
F019
F018
F021
F022
F024
F023
3018 4K7
3019 4K7
3020 4K7
3029 4K7
F048
7018 BC847BW
3017 4K7
F045
7009 BC847BW
6000 BAS316
6001 BAS316
I006
I007
3015 1K0
F043
RED
I008
7015-1 SI4946
7015-2 SI4946
F042
F041
3014 1K0
6006 BZX384-C18
3012 470R
2011 6n8
3013 560R
2012 6n8
6007 BZX384-C18
2020 47n
2021 47n
2022 47n
2030 47n
2031 47n
2032 47n
5007 22u
5008 22u
5002 22u
5014 BD21416-00
F027
B11B-XASK-1
A004
A003
TO CCFL
1M11
A002
F028
3030 4K7
F050
7019 BC847BW
+5V
3028 10K
3016 4K7
7001 P87LPC760BDH
VDD
MICROCONTROLLER
TXD
RXD
SCL
T0
INT0
SDA
P1<0:3>
RST
P1.5
P1.7
CIN1B
CIN1A
CMPREF
CMP1
P0<3:6>
CLKOUT
X2
X1
P2<0:1>
VSS
F001
F003
F002
F004
F005
F006
3025 4K7
F046
7010 BC847BW
I005
6002 BAS316
6003 BAS316
I009
BLUE
I010
3011 1K0
F040
7016-1 SI4946
7016-2 SI4946
F038
F037
3010 1K0
6008 BZX384-C18
3008 470R
2009 6n8
3009 560R
2010 6n8
6009 BZX384-C18
2040 47n
2041 47n
2042 47n
2050 47n
2051 47n
2052 47n
5015 BD21416-00
TO CCFL
F029
GND-HV
TO 2nd AMBI LIGHT PWB (OPTIONAL)
1M48
B3B-PH-K
F017
560R 3001
I002
2003 1n0
F016
F015
560R 3002
2004 1n0
I003
3026 1K0
3027 1K0
1050
DSX840GA
20M
3003 220R
2005 15p
2006 15p
3031 4K7
F060
3024 4K7
F047
7020 BC847BW
7011 BC847BW
I004
6004 BAS316
6005 BAS316
I011
GREEN
I012
3007 1K0
F036
7017-1 SI4946
7017-2 SI4946
F035
F034
3006 1K0
6010 BZX384-C18
3004 470R
2007 6n8
3005 560R
2008 6n8
6011 BZX384-C18
2060 47n
2061 47n
2062 47n
2070 47n
2071 47n
2072 47n
5016 BD21416-00
TO CCFL
1004
NC
B5B-PH-K
F014
F013
F012
F011
3022 100R
TO 1M49
B
SSB
1M49
B4B-PH-K
F010
F009
F008
F007
3023 100R
F098
3999 10K
F099
3042 1M0
F033
F032
F030
F031
A001
1M12
B03B-XASK-1
TO CCFL
3104 313 6072.6
WARNING HIGH VOLTAGE
F_15460_010.eps 060405
1 2 3 4 5 6 7 8 9 10
A B C D E

Layout Ambi Light (Top Side)

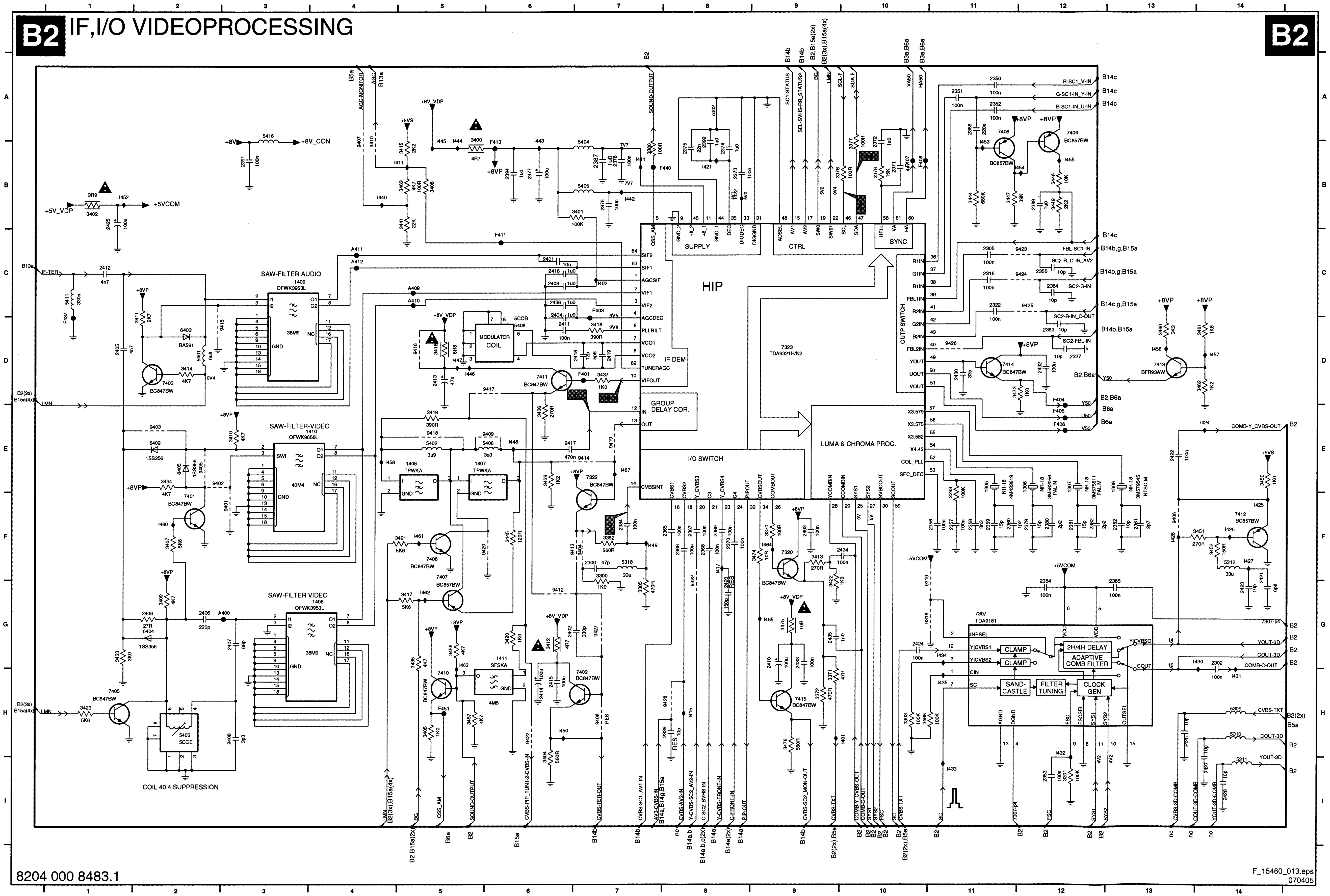
1004	B2	2001	B1	2010	B2	2040	A1	2070	A1	3007	B1	3016	B2	3026	B2	5007	B1	6004	B1	7002	B2	7020	B1
1010	B1	2002	B2	2011	B2	2041	A1	2071	A1	3008	B2	3017	B2	3027	B2	5008	B1	6005	B1	7009	B2		
1050	B2	2003	B2	2012	B2	2042	A2	2072	A1	3009	B2	3018	B2	3028	B2	5014	A2	6006	B2	7010	B2		
1M08	B1	2004	B2	2020	A2	2050	A2	3001	B2	3010	B2	3019	B2	3029	B2	5015	A1	6007	B2	7011	B1		
1M10	B1	2005	B2	2021	A2	2051	A2	3002	B2	3011	B2	3020	B2	3030	B2	5016	A1	6008	B2	7015	B2		
1M11	A2	2006	B2	2022	A2	2052	A2	3003	B2	3012	B2	3022	B2	3031	B2	6000	B2	6009	B2	7016	B2		
1M12	A1	2007	B1	2030	A2	2060	A1	3004	B1	3013	B2	3023	B2	3042	A1	6001	B2	6010	B1	7017	B1		
1M48	B2	2008	B1	2031	A2	2061	A1	3005	B1	3014	B2	3024	B2	3999	B1	6002	B2	6011	B1	7018	B2		
1M49	B2	2009	B2	2032	A2	2062	A1	3006	B1	3015	B2	3025	B2	5002	B2	6003	B2	7001	B2	7019	B2		


1
2
A
B
PHILIPS
1M12
1M11
5016
5015
5014
3042
7017
7016
7015
7001
OUT 7002
GND IN
5007
5008
5002
1010
1050
1M10
1M08
1M48
1004
1M49
3104 313 6072.6
F_15460_011.eps
060405

Layout Ambi Light (Bottom Side)

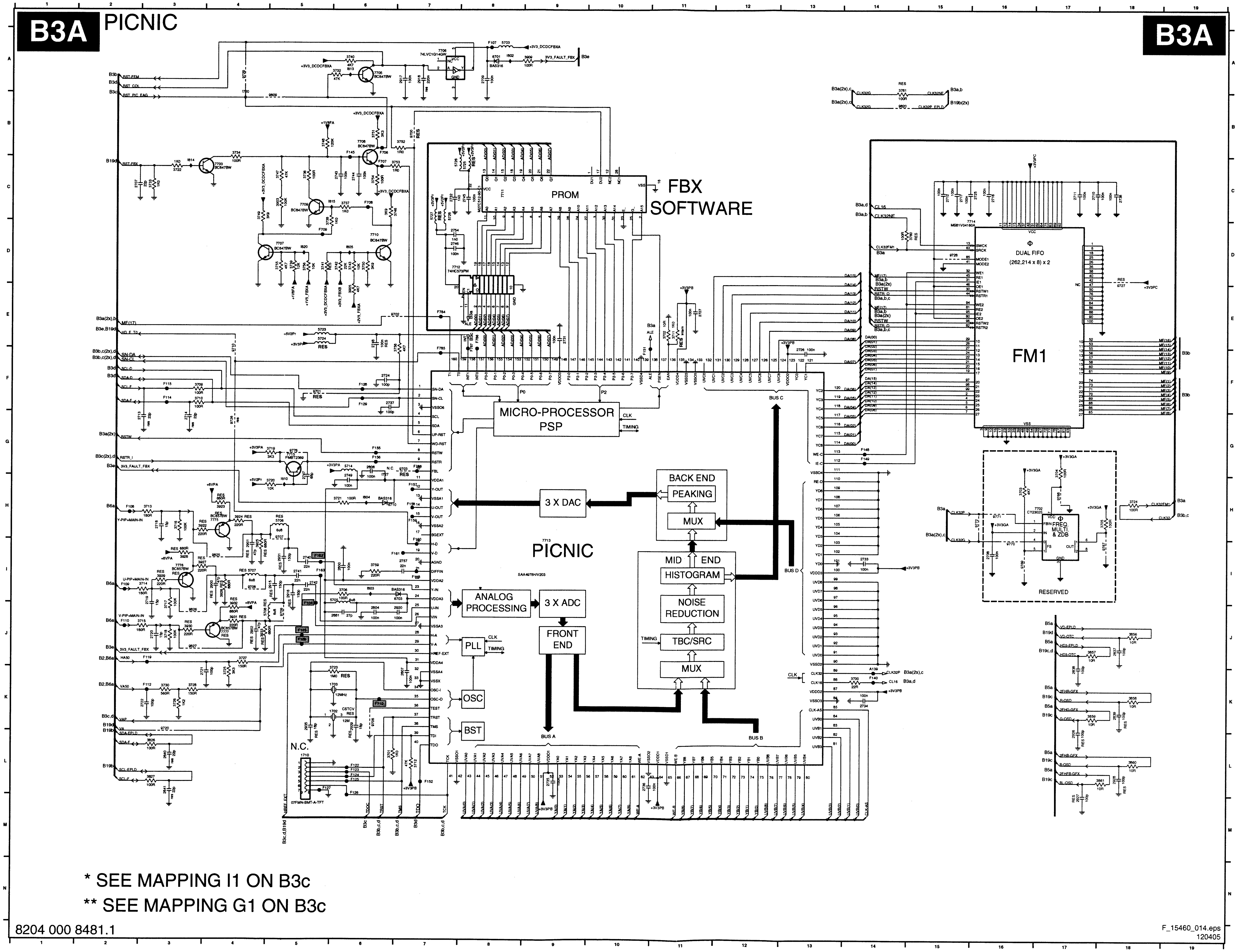

1
2
A
B
3104 313 6072.6
F_15460_012.eps
060405

SSB: IF, I/O Video Processing


B2
IF,I/O VIDEOPROCESSING
B2
HIP
7323
TDA9321H/N2
SUPPLY
CTRL
SYNC
IF DEM
GROUP DELAY COR.
I/O SWITCH
LUMA & CHROMA PROC.
OUTP SWITCH
SAW-FILTER AUDIO
1409
OFWK3953L
SAW-FILTER-VIDEO
1410
OFWK9656L
SAW-FILTER VIDEO
1408
OFWK3953L
MODULATOR COIL
5CCB
5408
1406
TPWKA
1407
TPWKA
1411
SFSKA
COIL 40.4 SUPPRESSION
5403
5CCE
7307
TDA9181
CLAMP
CLAMP
2H/4H DELAY
ADAPTIVE COMB FILTER
SAND-CASTLE
FILTER TUNING
CLOCK GEN
+8V_CON
+5VCOM
+5V_VDP
+8VP
+8V_VDP
+5VS
+5VCOM
IF-TER
LMN
AGC-MONITOR
AGC
SOUND-OUTPUT
SC1-STATUS
SEL-SVHS-RR_STATUS2
SCL-F
SDA-F
VA50
HA50
R-SC1_V-IN
G-SC1-IN_Y-IN
B-SC1-IN_U-IN
FBL-SC1-IN
SC2-R_C-IN_AV2
SC2-G-IN
SC2-B-IN_C-OUT
SC2-FBL-IN
COMB-Y_CVBS-OUT
YOUT-3D
COMB-C-OUT
COUT-3D
CVBS-TXT
YOUT-3D
CVBS-SC1_AV1-IN
CVBS-SC2_AV2-IN
C-SC2_SVHS-IN
Y-CVBS-FRONT-IN
C-FRONT-IN
PIP-OUT
CVBS-SC2_MON-OUT
CVBS-TXT
COMB-Y_CVBS-OUT
COMB-C-OUT
CVBS-PIP_TUN1-2-CVBS-IN
CVBS-TER-OUT
QSS_AM
SOUND-OUTPUT
CVBS-3D-COMB
COUT-3D-COMB
YOUT-3D-COMB
BC847BW
BC857BW
BFR93AW
BA591
1SS356
8204 000 8483.1
F_15460_013.eps
070405

1305	E11
1306	E12
1307	E12
1308	E13
1406	E5
1407	E5
1408	G4
1409	C3
1410	E4
1411	G6
2300	F7
2302	G14
2305	C11
2316	C11
2322	C11
2327	D12
2339	H8
2350	A11
2351	A11
2352	A11
2353	I12
2354	G12
2355	C12
2356	F11
2357	F11
2358	F11
2359	F11
2360	F11
2361	F13
2362	F13
2364	C12
2365	F8
2366	F8
2367	F8
2368	F8
2369	F8
2370	F8
2371	B10
2372	B10
2373	B8
2374	B8
2375	B8
2376	B7
2377	B6
2378	B7
2379	F12
2380	F12
2381	F12
2382	F12
2383	D12
2384	F7
2385	G13
2387	B7
2388	A11
2389	B12
2391	B3
2392	B8
2394	B6
2401	C6
2402	G6
2403	F9
2404	C7
2405	D1
2406	G2
2407	G3
2408	H3
2409	C7
2410	G9
2411	D6
2412	C1
2413	D5
2414	H6
2415	H6
2416	C7
2417	E6
2418	D6
2419	D7
2420	G8
2421	F14
2422	E13
2423	G14
2424	G10
2425	B1
2426	H13
2427	I14
2428	I14
2430	D11
2432	D12
2433	G9
2434	F10
2435	G9
2436	C7
3300	F7
3301	I12
3303	H10
3370	F9
3371	H9
3372	H9
3376	B9
3377	B10
3378	B10
3380	B7
3382	F7
3385	G7
3393	F11
3400	B5
3401	B7
3402	B1
3404	I6
3405	H5
3406	G2
3407	F2
3408	B5
3409	G2
3410	E3
3411	D2
3412	G6
3413	F9
3414	D2
3415	B5
3416	D5
3417	G5
3418	D7
3419	E5
3420	G6
3421	F5
3422	G9
3423	H1
3433	G1
3434	E2
3435	G5
3436	E6
3437	D7
3439	E6
3441	B5
3444	B11
3445	F6
3447	B11
3448	B12
3449	B12
3450	E14
3451	F14
3452	F14
3456	G5
3457	H5
3460	D13
3461	D14
3462	D14
3463	B5
3468	H10
3473	D11
3474	F9
3475	G9
3476	H9
5309	H14
5310	H14
5311	I14
5312	F14
5318	F7
5401	D2
5402	E5
5403	H2
5404	B7
5405	B7
5406	E6
5408	D6
5411	C1
5416	A3
6402	E2
6403	D2
6404	G2
6405	E2
7307	G11
7320	F9
7322	E7
7323	D9
7401	F2
7402	H7
7403	D2
7405	H1
7406	F5
7407	F5
7408	A11
7409	A12
7410	H5
7411	D6
7412	F14
7413	D13
7414	D11
7415	H9
9318	G11
9319	G11
9322	G8
9401	F3
9402	E2
9403	E2
9404	F7
9405	E2
9406	F13
9407	B4
9408	H7
9409	E6
9410	B4
9412	G6
9413	F7
9414	E7
9415	D2
9416	D5
9417	D6
9418	E5
9419	E7
9420	F6
9422	H6
9423	C11
9424	C11
9425	C12
9426	D11
9427	G7
9428	H8
A400	G3
A409	C5
A410	C5
A411	C4
A412	C4
F401	D7
F403	C7
F404	D12
F405	E12
F406	E12
F407	B10
F408	B10
F411	C6
F413	B6
F437	D1
F440	B8
I401	H10
I402	C7
I411	B5
I415	H8
I417	F8
I421	B8
I422	B8
I424	E14
I425	F14
I426	F14
I427	F14
I428	F13
I430	G14
I431	H14
I432	H12
I433	I11
I434	G11
I435	H11
I440	B4
I441	B7
I442	B7
I443	B6
I444	B5
I445	B5
I446	D5
I447	D5
I448	E6
I449	F7
I450	H6
I451	H5
I452	B1
I453	B11
I454	B12
I455	B12
I456	D13
I457	D14
I458	E4
I460	F2
I461	F5
I462	G5
I463	G5
I464	F9
I465	G9
I467	E7
c002	A8

SSB: PICNIC


B3A
PICNIC
B3A
PROM
FBX
SOFTWARE
MICRO-PROCESSOR
PSP
CLK
TIMING
3 X DAC
BACK END
PEAKING
MUX
PICNIC
7713
SAA4978H/V203
MID END
HISTOGRAM
NOISE
REDUCTION
TBC/SRC
MUX
ANALOG
PROCESSING
3 X ADC
FRONT
END
PLL
OSC
BST
BUS A
BUS B
BUS C
BUS D
N.C.
DUAL FIFO
(262,214 x 8) x 2
FM1
FREQ.
MULTI.
& ZDB
RESERVED
74LVC1G14GW
74HC573PW
M581V04160A
07FMN-BMT-A-TFT

* SEE MAPPING I1 ON B3c

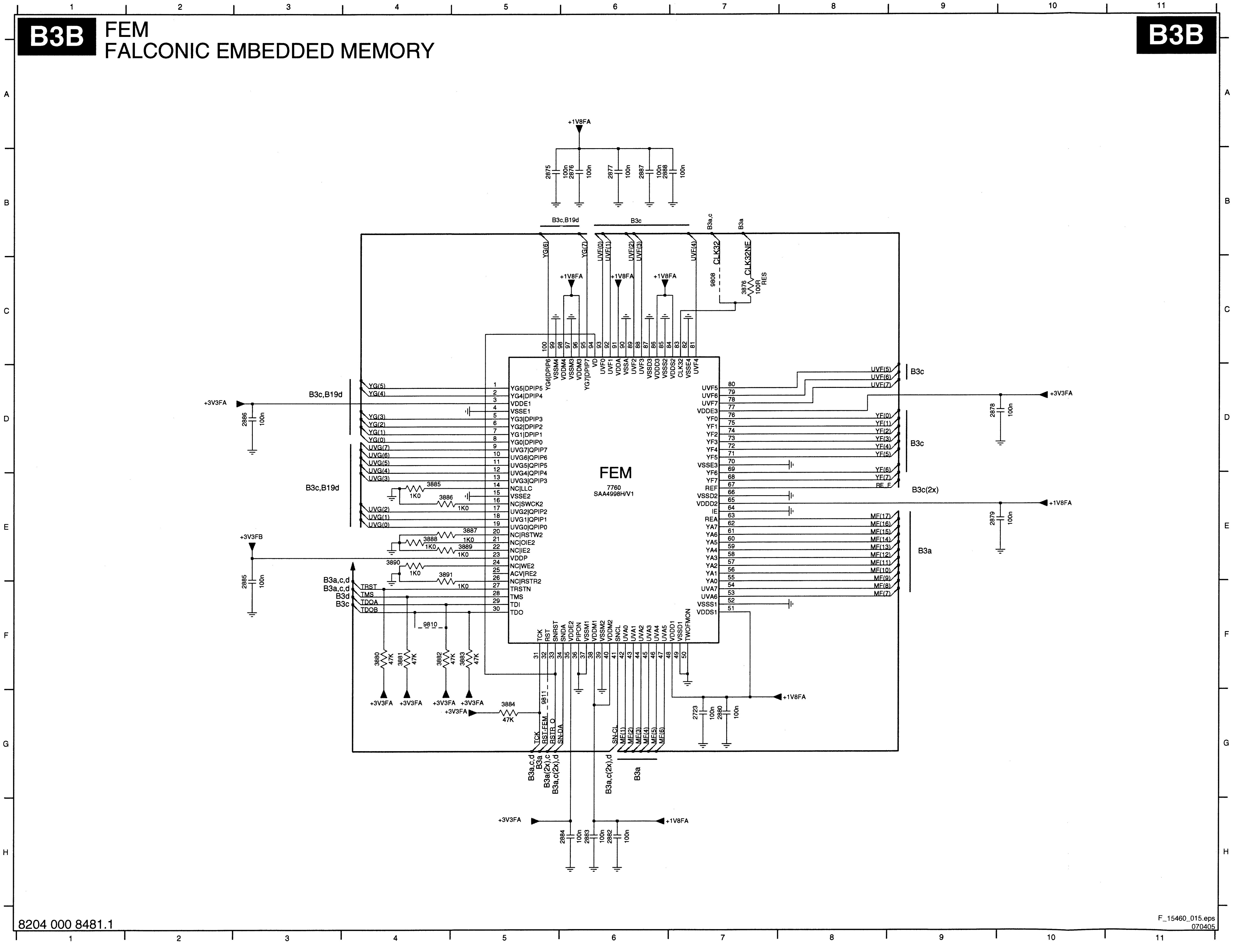
** SEE MAPPING G1 ON B3c

8204 000 8481.1

F_15460_014.eps
120405

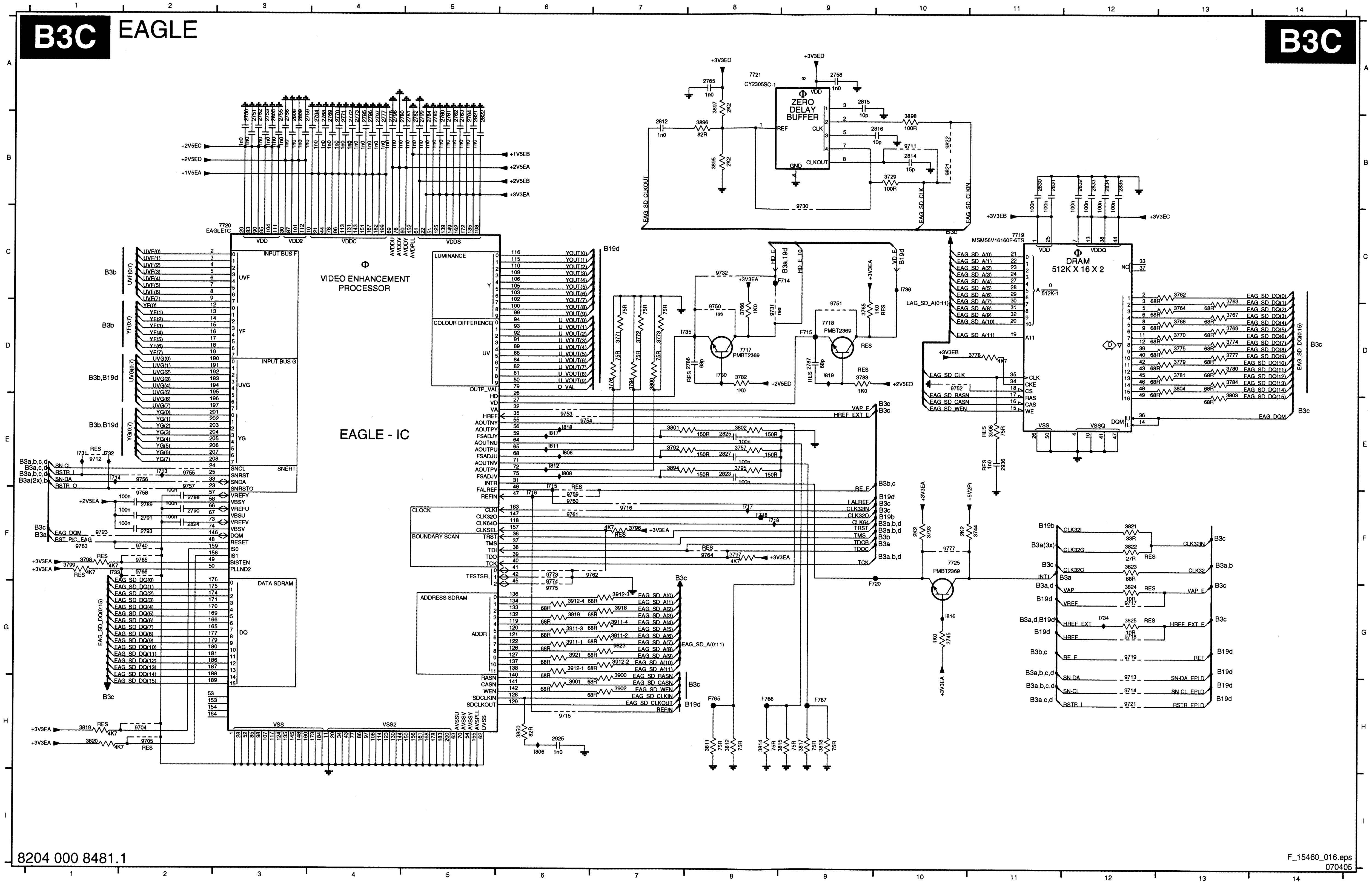
1702	K6
1703	K6
1710	L5
2707	C2
2708	I16
2709	A8
2710	C17
2711	C17
2712	C15
2713	G2
2714	G3
2716	C16
2717	C15
2718	H3
2719	I3
2720	J3
2721	K3
2722	K3
2724	F6
2725	C16
2726	F13
2727	E11
2731	E9
2732	C7
2733	I14
2734	K14
2735	L9
2736	L10
2737	F6
2738	C18
2740	I5
2741	I5
2742	I5
2743	C6
2744	C6
2745	C8
2746	D7
2747	H5
2748	E6
2749	H6
2754	D7
2757	I7
2800	I6
2804	J6
2806	G6
2807	K7
2837	J18
2838	K17
2839	K18
2840	L3
2841	L3
2881	J6
2900	I4
2901	I4
2902	J4
2915	I5
2916	I5
2917	A7
2918	A7
2920	J7
2926	L17
2927	M17
2928	L18
2929	K6
2931	I5
2935	K5
3700	K14
3701	L6
3702	E11
3703	H16
3704	G17
3705	H18
3706	I6
3709	F3
3710	F3
3711	E11
3712	L7
3713	H3
3714	I3
3715	J3
3716	H3
3717	J3
3718	J3
3719	G5
3720	H5
3721	H6
3722	C3
3723	K6
3724	H18
3725	K4
3726	K3
3727	J4
3728	K3
3730	K3
3732	A6
3733	C3
3734	B4
3736	C5
3737	C6
3738	D5
3739	D5
3740	A6
3741	D5
3742	D6
3743	D6
3746	C6
3747	C5
3748	B5
3749	C4
3750	D6
3751	B6
3752	B7
3753	C6
3754	C6
3755	D5
3756	D5
3758	F7
3759	I6
3760	D15
3761	A14
3826	L3
3827	L3
3856	J18
3857	J17
3858	K18
3859	K17
3860	L18
3861	L18
3903	C5
3905	E6
3909	A9
3922	H3
3923	H4
3924	H4
3925	I4
3926	I4
3927	I3
3928	I3
3929	I3
3930	J3
3931	J4
3932	J4
3933	J4
5703	A8
5705	I6
5706	H5
5707	I4
5708	J4
5714	G6
5723	E5
5724	E5
5725	C8
5726	C7
5727	C7
5728	C7
6701	A8
6703	I7
6710	H6
7702	H17
7703	C4
7705	A6
7706	A7
7707	D5
7708	B6
7709	C5
7710	D6
7711	C8
7712	D7
7713	I9
7714	D16
7715	G5
7775	H4
7776	I3
7777	J4
9700	B7
9701	F5
9702	E6
9703	G7
9706	K6
9707	I5
9708	I4
9709	J5
9710	F4
9720	L3
9726	G4
9727	D18
9728	D15
9729	A4
9767	I18
9768	H17
9769	I16
9770	I16
9771	H16
9772	H16
9776	G5
9809	B5
9820	B14
9825	I4
9826	J3
9827	J3
A139	K14
F107	A8
F108	H2
F109	I2
F110	J2
F112	K3
F114	F3
F115	F3
F118	I7
F119	J3
F122	L6
F123	L6
F124	L6
F125	L6
F126	M6
F127	L5
F128	F6
F129	F6
F140	K14
F145	B6
F148	G14
F149	G14
F151	F10
F152	L7
F155	G6
F156	G6
F157	H7
F158	H7
F159	H7
F160	I7
F161	I7
F162	I5
F163	I5
F164	J5
F165	J5
F166	J5
F706	B6
F707	C6
F708	C6
F709	D5
F710	K6
F784	E7
F785	F7
F786	E8
F787	F8
F788	G7
I720	A4
I727	G6
I802	A8
I803	I6
I804	H6
I805	D6
I810	H5
I813	A6
I814	C3
I815	C5
I820	D5

SSB: (FEM) Falconic Embedded Memory


B3B
FEM
FALCONIC EMBEDDED MEMORY
B3B
FEM
7760
SAA4998H/V1
+1V8FA
+3V3FA
+3V3FB
2875 100n
2876 100n
2877 100n
2887 100n
2888 100n
2878 100n
2879 100n
2886 100n
2885 100n
2723 100n
2880 100n
2884 100n
2883 100n
2882 100n
3876 100R RES
9808
9810
9811
3880 47K
3881 47K
3882 47K
3883 47K
3884 47K
3885 1K0
3886 1K0
3887 1K0
3888 1K0
3889 1K0
3890 1K0
3891 1K0
B3c,B19d
B3c
B3a,c
B3a
B3c(2x)
B3a,c,d
B3d
B3a(2x),c
B3a,c(2x),d
YG(0) YG(1) YG(2) YG(3) YG(4) YG(5) YG(6) YG(7)
UVG(0) UVG(1) UVG(2) UVG(3) UVG(4) UVG(5) UVG(6) UVG(7)
UVF(0) UVF(1) UVF(2) UVF(3) UVF(4) UVF(5) UVF(6) UVF(7)
YF(0) YF(1) YF(2) YF(3) YF(4) YF(5) YF(6) YF(7)
RE_F
MF(1) MF(2) MF(3) MF(4) MF(5) MF(6) MF(7) MF(8) MF(9) MF(10) MF(11) MF(12) MF(13) MF(14) MF(15) MF(16) MF(17)
CLK32
CLK32NE
TRST TMS TDOA TDOB
TCK RST_FEM RSTR_O SN-DA SN-CL
1 YG5|DPIP5
2 YG4|DPIP4
3 VDDE1
4 VSSE1
5 YG3|DPIP3
6 YG2|DPIP2
7 YG1|DPIP1
8 YG0|DPIP0
9 UVG7|QPIP7
10 UVG6|QPIP6
11 UVG5|QPIP5
12 UVG4|QPIP4
13 UVG3|QPIP3
14 NC|LLC
15 VSSE2
16 NC|SWCK2
17 UVG2|QPIP2
18 UVG1|QPIP1
19 UVG0|QPIP0
20 NC|RSTW2
21 NC|OIE2
22 NC|IE2
23 VDDP
24 NC|WE2
25 ACV|RE2
26 NC|RSTR2
27 TRSTN
28 TMS
29 TDI
30 TDO
31 TCK
32 RST
33 SNRST
34 SNDA
35 VDDE2
36 PIPON
37 VSSM1
38 VDDM1
39 VSSM2
40 VDDM2
41 SNCL
42 UVA0
43 UVA1
44 UVA2
45 UVA3
46 UVA4
47 UVA5
48 VDDD1
49 VSSD1
50 TWOFMON
51 VDDS1
52 VSSS1
53 UVA6
54 UVA7
55 YA0
56 YA1
57 YA2
58 YA3
59 YA4
60 YA5
61 YA6
62 YA7
63 REA
64 IE
65 VDDD2
66 VSSD2
67 REF
68 YF7
69 YF6
70 VSSE3
71 YF5
72 YF4
73 YF3
74 YF2
75 YF1
76 YF0
77 VDDE3
78 UVF7
79 UVF6
80 UVF5
81 UVF4
82 VSSE4
83 CLK32
84 VDDS2
85 VSSS2
86 VDDD3
87 VSSD3
88 UVF3
89 UVF2
90 VSSA
91 VDDA
92 UVF1
93 UVF0
94 VD
95 YG7|DPIP7
96 VDDM3
97 VSSM3
98 VDDM4
99 VSSM4
100 YG6|DPIP6
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H
8204 000 8481.1
F_15460_015.eps
070405

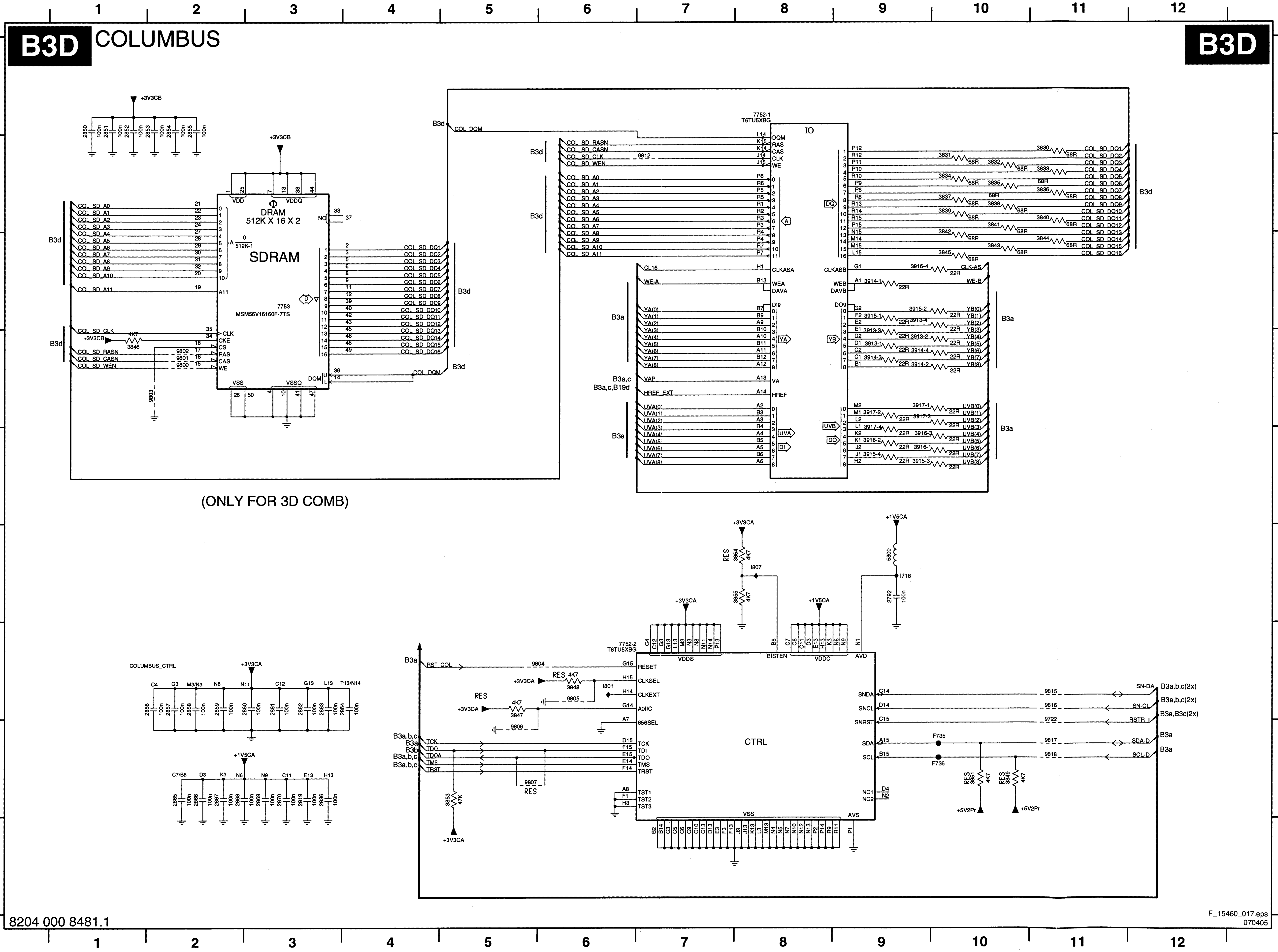
2723	G7
2875	B5
2876	B6
2877	B6
2878	D9
2879	E9
2880	G7
2882	H6
2883	H6
2884	H6
2885	F3
2886	D3
2887	B6
2888	B6
3876	C7
3880	F4
3881	F4
3882	F4
3883	F5
3884	G5
3885	E4
3886	E4
3887	E5
3888	E4
3889	E5
3890	E4
3891	E4
7760	E6
9808	C7
9810	F4
9811	G5

SSB: Eagle


B3C
EAGLE
B3C
VIDEO ENHANCEMENT PROCESSOR
EAGLE - IC
ZERO DELAY BUFFER
CY2305SC-1
DRAM 512K X 16 X 2
MSM56V16160F-6TS
PMBT2369
INPUT BUS F
INPUT BUS G
DATA SDRAM
ADDRESS SDRAM
LUMINANCE
COLOUR DIFFERENCE
CLOCK
BOUNDARY SCAN
8204 000 8481.1
F_15460_016.eps
070405

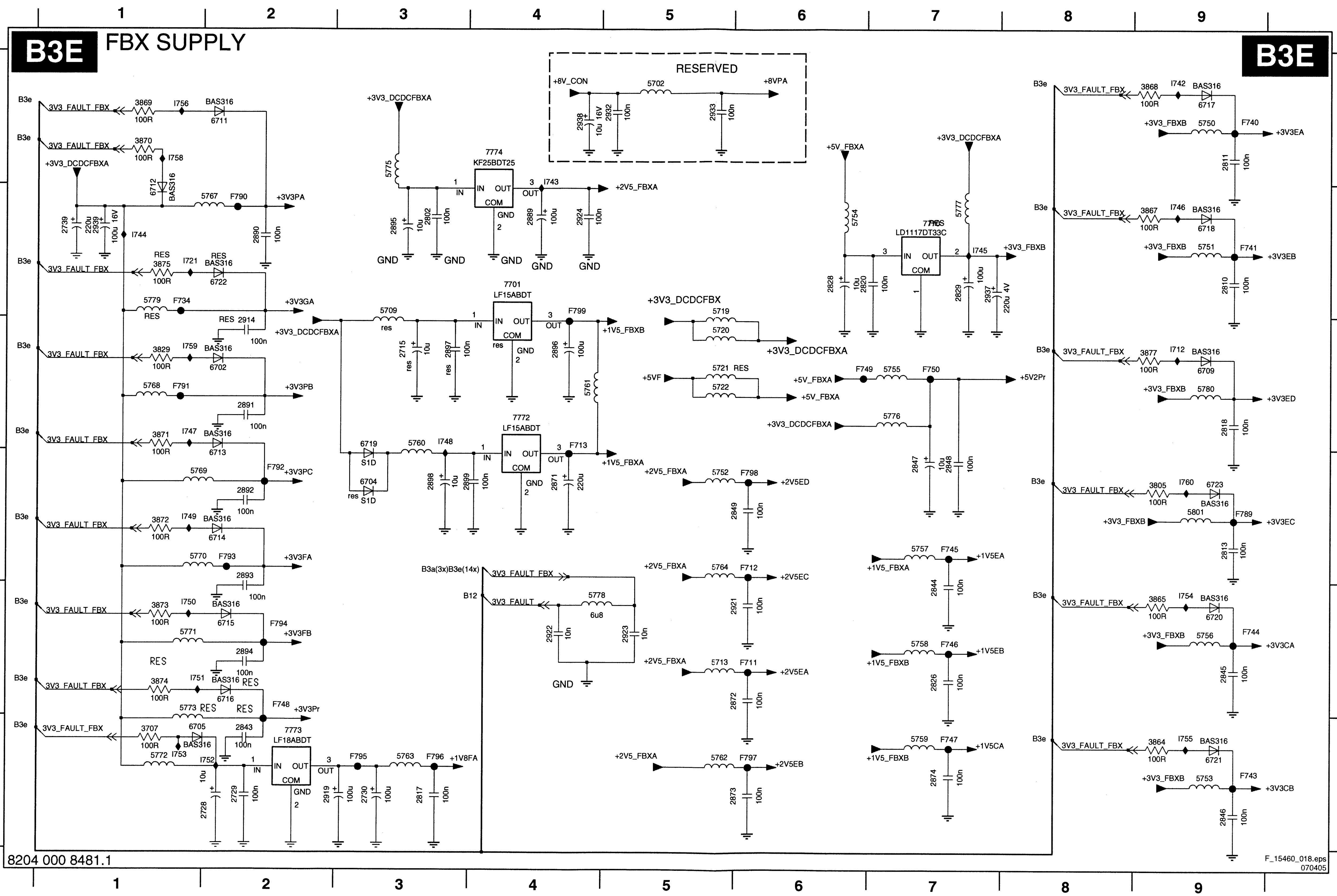
2750	B3
2751	B3
2752	B3
2753	B3
2755	B3
2756	B3
2758	A9
2759	B3
2760	B5
2761	B5
2762	B5
2763	B5
2764	B5
2765	A8
2768	B4
2769	B4
2770	B4
2771	B4
2772	B4
2773	B4
2777	B4
2778	B4
2780	B4
2781	B5
2782	B5
2784	B5
2785	B5
2786	D8
2787	D9
2788	F2
2789	F2
2790	F2
2791	F2
2793	F2
2794	B4
2795	B4
2796	B4
2797	B4
2798	B4
2799	B5
2805	B3
2808	B3
2809	B3
2812	B7
2814	B10
2815	A9
2816	B10
2821	B5
2822	B5
2823	E8
2824	F2
2825	E8
2827	E8
2830	B11
2831	B11
2832	B12
2833	B12
2834	B12
2835	B12
2925	H6
2936	E11
3729	B10
3744	F11
3745	G10
3757	E8
3762	C13
3763	D13
3764	D13
3765	D9
3766	D8
3767	D13
3768	D13
3769	D13
3770	D13
3771	D7
3772	D7
3773	D7
3774	D13
3775	D13
3776	D7
3777	D13
3778	D11
3779	D13
3780	D13
3781	D13
3782	D8
3783	D9
3784	D13
3792	E7
3793	F10
3794	D7
3795	E8
3796	F7
3797	F8
3798	F1
3799	F1
3800	D7
3801	E7
3802	E8
3803	E13
3804	D13
3811	H8
3812	H8
3814	H8
3815	H9
3817	H9
3818	H9
3819	H1
3820	H1
3821	F12
3822	F12
3823	F12
3824	G12
3825	G12
3850	H6
3894	E7
3895	B8
3896	B8
3897	A8
3898	B10
3900	H7
3901	H6
3902	H7
3906	E11
3911-1	G6
3911-2	G7
3911-3	G6
3911-4	G7
3912-1	G6
3912-2	G7
3912-3	G7
3912-4	G6
3918	G7
3919	G6
3921	G6
7717	D8
7718	D9
7719	C11
7720	C3
7721	A8
7725	F10
9704	H2
9705	H2
9711	B10
9712	E1
9713	H12
9714	H12
9715	H6
9716	F7
9717	G12
9718	G12
9719	G12
9721	H12
9723	F1
9730	C9
9731	D8
9732	C8
9740	F2
9750	D8
9751	D9
9752	D10
9753	E6
9754	E6
9755	E2
9756	E2
9757	F2
9758	F2
9759	F6
9760	F6
9761	F6
9762	F7
9763	F1
9764	F8
9765	F2
9766	F2
9773	F6
9774	G6
9775	G6
9777	F10
9821	B10
9822	B10
9823	G7
F714	C9
F715	D9
F718	F8
F720	G10
F765	H8
F766	H8
F767	H9
I713	E2
I714	E1
I715	E6
I716	F6
I717	F8
I719	F8
I730	D8
I731	E1
I732	E1
I733	F1
I734	G12
I735	D7
I736	C10
I806	H6
I808	E6
I809	E6
I811	E6
I812	E6
I816	G10
I817	E6
I818	E6
I819	D9

SSB: Columbus


B3D COLUMBUS
B3D
(ONLY FOR 3D COMB)
DRAM
512K X 16 X 2
SDRAM
7753
MSM56V16160F-7TS
7752-1
T6TU5XBG
IO
7752-2
T6TU5XBG
CTRL
COLUMBUS_CTRL
+3V3CB
+3V3CA
+1V5CA
+5V2Pr
VDD
VDDQ
VSS
VSSQ
VDDS
VDDC
AVD
AVS
BISTEN
RESET
CLKSEL
CLKEXT
A0IIC
656SEL
TCK
TDI
TDO
TMS
TRST
TST1
TST2
TST3
SNDA
SNCL
SNRST
SDA
SCL
NC1
NC2
CLKASA
CLKASB
WEA
DAVA
WEB
DAVB
VA
HREF
DQM
RAS
CAS
CLK
WE
CKE
CS
COL_SD_A0 … COL_SD_A11
COL_SD_DQ1 … COL_SD_DQ16
COL_SD_CLK
COL_SD_RASN
COL_SD_CASN
COL_SD_WEN
COL_DQM
CL16
WE-A
WE-B
CLK-AS
YA(0) … YA(8)
YB(0) … YB(8)
UVA(0) … UVA(8)
UVB(0) … UVB(8)
VAP
HREF_EXT
RST_COL
SN-DA
SN-CL
RSTR_I
SDA-D
SCL-D
B3a
B3d
B3a,b,c
B3a,c
B3a,c,B19d
B3a,b,c(2x)
B3a,B3c(2x)
RES
4K7
47K
68R
22R
100n
F735
F736
I718
I801
I807
5800
8204 000 8481.1
F_15460_017.eps
070405

2792	F9
2819	H3
2836	H3
2850	A1
2851	A1
2852	A1
2853	A2
2854	A2
2855	A2
2856	G2
2857	G2
2858	G2
2859	G2
2860	G3
2861	G3
2862	G3
2863	G3
2864	G4
2865	H2
2866	H2
2867	H2
2868	H2
2869	H3
2870	H3
3830	B11
3831	B10
3832	B10
3833	B11
3834	B10
3835	B10
3836	B11
3837	B10
3838	B10
3839	B10
3840	B11
3841	B10
3842	C10
3843	C10
3844	C11
3845	C10
3846	D1
3847	G5
3848	G6
3849	H10
3851	H10
3853	H5
3854	F8
3855	F8
3913-1	D9
3913-2	D9
3913-3	D9
3913-4	C9
3914-1	C9
3914-2	D9
3914-3	D9
3914-4	D9
3915-1	C9
3915-2	C9
3915-3	E9
3915-4	E9
3916-1	E9
3916-2	E9
3916-3	E9
3916-4	C9
3917-1	D9
3917-2	D9
3917-3	D9
3917-4	E9
5800	F9
7752-1	A8
7752-2	G7
7753	C3
9722	H11
9800	D2
9801	D2
9802	D2
9803	D2
9804	G6
9805	G6
9806	H5
9807	H5
9812	B7
9815	G11
9816	G11
9817	H11
9818	H11
F735	H10
F736	H10
I718	F9
I801	G6
I807	F8

SSB: FBX Supply


B3E
FBX SUPPLY
RESERVED
+8V_CON
5702
+8VPA
2938 10u 16V
2932 100n
2933 100n
3V3_FAULT_FBX
3869 100R
I756
BAS316 6711
3870 100R
I758
+3V3_DCDCFBXA
6712 BAS316
5767
F790
+3V3PA
2739
2939 220u 16V
100u 16V
I744
2890 100n
RES 3875 100R
I721
RES BAS316 6722
5779 RES
F734
+3V3GA
RES 2914 100n
3829 100R
I759
BAS316 6702
5768
F791
+3V3PB
2891 100n
3871 100R
I747
BAS316 6713
5769
F792
+3V3PC
2892 100n
3872 100R
I749
BAS316 6714
5770
F793
+3V3FA
2893 100n
3873 100R
I750
BAS316 6715
F794
+3V3FB
5771
RES
2894 100n
3874 100R
I751
BAS316 RES 6716
5773 RES
F748
+3V3Pr
3707 100R
6705 BAS316
2843 100n
5772
I753
I752
7773 LF18ABDT
IN OUT COM GND
F795
5763
F796
+1V8FA
2728 10u
2729 100n
2919 100u
2730 100u
2817 100n
5775
7774 KF25BDT25
I743
+2V5_FBXA
2895 10u
2802 100n
2889 100u
2924 100n
GND
7701 LF15ABDT
5709 res
F799
+1V5_FBXB
2715 res 10u
2897 res 100n
2896 100u
5761
7772 LF15ABDT
6719 S1D
6704 res S1D
5760
I748
F713
+1V5_FBXA
2898 10u
2899 100n
2871 220u
B3a(3x)B3e(14x)
B12
3V3_FAULT
5778 6u8
2922 10n
2923 10n
+3V3_DCDCFBX
5719
5720
+3V3_DCDCFBXA
+5VF
5721 RES
5722
+5V_FBXA
+2V5_FBXA
5752
F798
+2V5ED
2849 100n
5764
F712
+2V5EC
2921 100n
5713
F711
+2V5EA
2872 100n
5762
F797
+2V5EB
2873 100n
+5V_FBXA
5754
7770 RES LD1117DT33C
+3V3_DCDCFBXA
5777
I745
+3V3_FBXB
2828 10u
2820 100n
2829 100u
2937 220u 4V
F749
5755
F750
+5V2Pr
5776
2847 10u
2848 100n
5757
F745
+1V5EA
+1V5_FBXA
2844 100n
5758
F746
+1V5EB
+1V5_FBXB
2826 100n
5759
F747
+1V5CA
2874 100n
3868 100R
I742
BAS316 6717
+3V3_FBXB
5750
F740
+3V3EA
2811 100n
3867 100R
I746
BAS316 6718
5751
F741
+3V3EB
2810 100n
3877 100R
I712
BAS316 6709
5780
+3V3ED
2818 100n
3805 100R
I760
6723 BAS316
5801
F789
+3V3EC
2813 100n
3865 100R
I754
BAS316 6720
5756
F744
+3V3CA
2845 100n
3864 100R
I755
BAS316 6721
5753
F743
+3V3CB
2846 100n
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070405

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2728	F2
2729	F2
2730	F3
2739	B1
2802	B3
2810	B9
2811	A9
2813	D9
2817	F3
2818	C9
2820	B6
2826	E7
2828	B6
2829	B7
2843	F2
2844	E7
2845	E9
2846	F9
2847	D7
2848	D7
2849	D6
2871	D4
2872	E6
2873	F6
2874	F7
2889	B4
2890	B2
2891	C2
2892	D2
2893	D2
2894	E2
2895	B3
2896	C4
2897	C3
2898	D3
2899	D4
2914	C2
2919	F2
2921	E6
2922	E4
2923	E5
2924	B4
2932	A5
2933	A5
2937	B7
2938	A4
2939	B1
3707	F1
3805	D9
3829	C1
3864	F9
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3868	A9
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3870	A1
3871	C1
3872	D1
3873	E1
3874	E1
3875	B1
3877	C9
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5709	B3
5713	E5
5719	B5
5720	C5
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5761	C4
5762	F5
5763	F3
5764	D5
5767	B2
5768	C1
5769	D1
5770	D1
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5772	F1
5773	E1
5775	A3
5776	C7
5777	B7
5778	E4
5779	B1
5780	C9
5801	D9
6702	C2
6704	D3
6705	F1
6709	C9
6711	A2
6712	B1
6713	D2
6714	D2
6715	E2
6716	E2
6717	A9
6718	B9
6719	C3
6720	E9
6721	F9
6722	B2
6723	D9
7701	B4
7770	B7
7772	C4
7773	F2
7774	A4
F711	E6
F712	D6
F713	C4
F734	B1
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F745	D7
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F747	F7
F748	E2
F749	C6
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F794	E2
F795	F3
F796	F3
F797	F6
F798	D6
F799	B4
I712	C9
I721	B1
I742	A9
I743	A4
I744	B1
I745	B7
I746	B9
I747	C1
I748	C3
I749	D1
I750	E1
I751	E1
I752	F2
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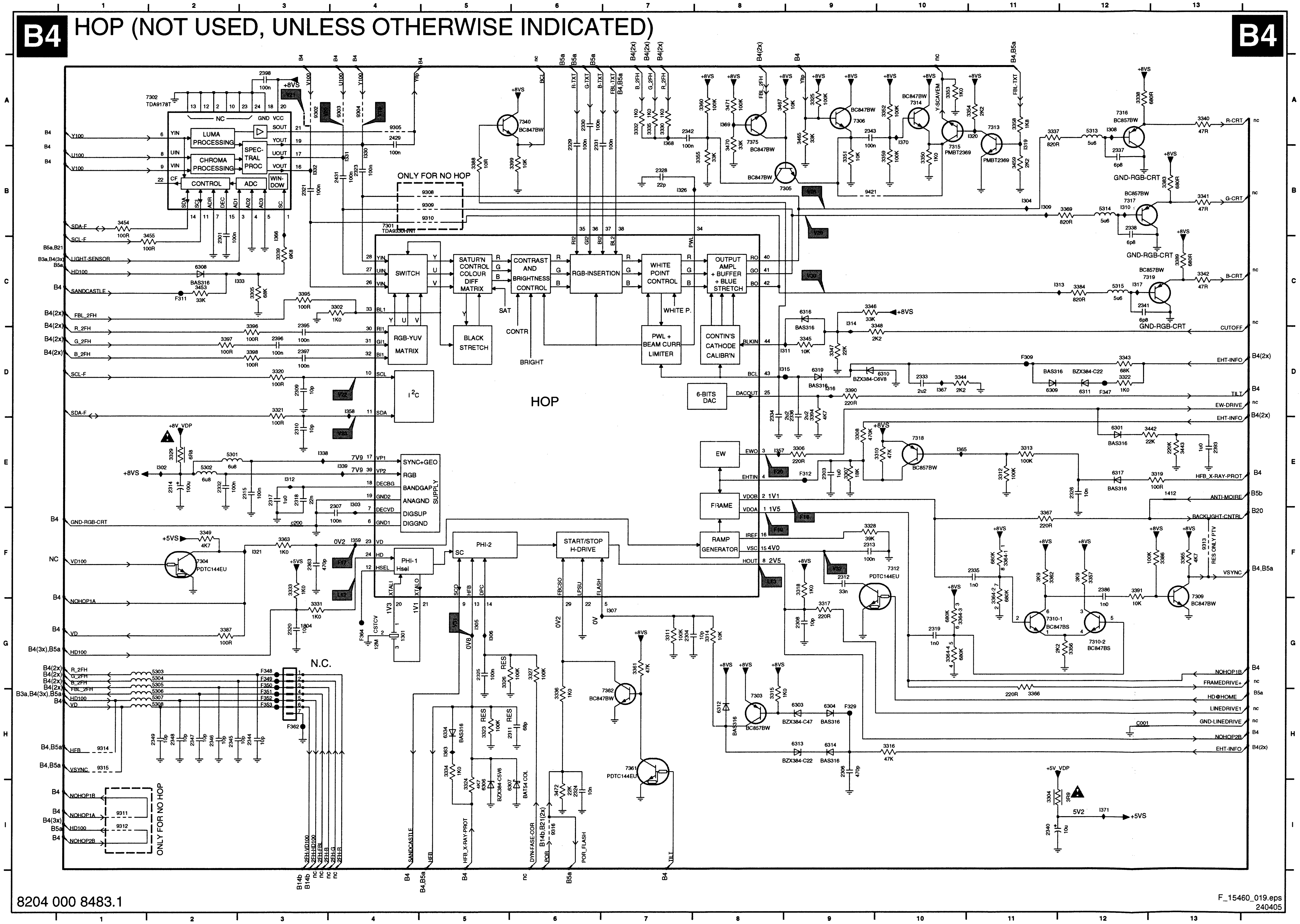
I759	C1
I760	D9

SSB: HOP


B4
HOP (NOT USED, UNLESS OTHERWISE INDICATED)
B4
7302 TDA9178T
LUMA PROCESSING
CHROMA PROCESSING
SPEC-TRAL PROC
CONTROL
ADC
WIN-DOW
ONLY FOR NO HOP
7301 TDA933xH/N1
SWITCH
SATUR'N CONTROL COLOUR DIFF MATRIX
CONTRAST AND BRIGHTNESS CONTROL
RGB-INSERTION
WHITE POINT CONTROL
OUTPUT AMPL + BUFFER + BLUE STRETCH
RGB-YUV MATRIX
BLACK STRETCH
PWL + BEAM CURR LIMITER
CONTIN'S CATHODE CALIBR'N
6-BITS DAC
I²C
HOP
SYNC+GEO
RGB
BANDGAP
ANAGND
DIGSUP
DIGGND
SUPPLY
EW
FRAME
RAMP GENERATOR
PHI-1
PHI-2
START/STOP H-DRIVE
N.C.
ONLY FOR NO HOP
R-CRT
G-CRT
B-CRT
CUTOFF
EHT-INFO
TILT
EW-DRIVE
HFB_X-RAY-PROT
ANTI-MOIRE
BACKLIGHT-CNTRL
VSYNC
NOHOP1B
FRAMEDRIVE+
HD@HOME
LINEDRIVE1
GND-LINEDRIVE
NOHOP2B
8204 000 8483.1
F_15460_019.eps
240405

1301	G4
1304	G3
1412	E13
2301	B2
2303	E9
2304	G7
2306	H9
2307	F4
2308	G9
2309	D3
2310	E3
2311	H6
2312	F9
2313	F9
2314	E2
2315	E3
2317	E3
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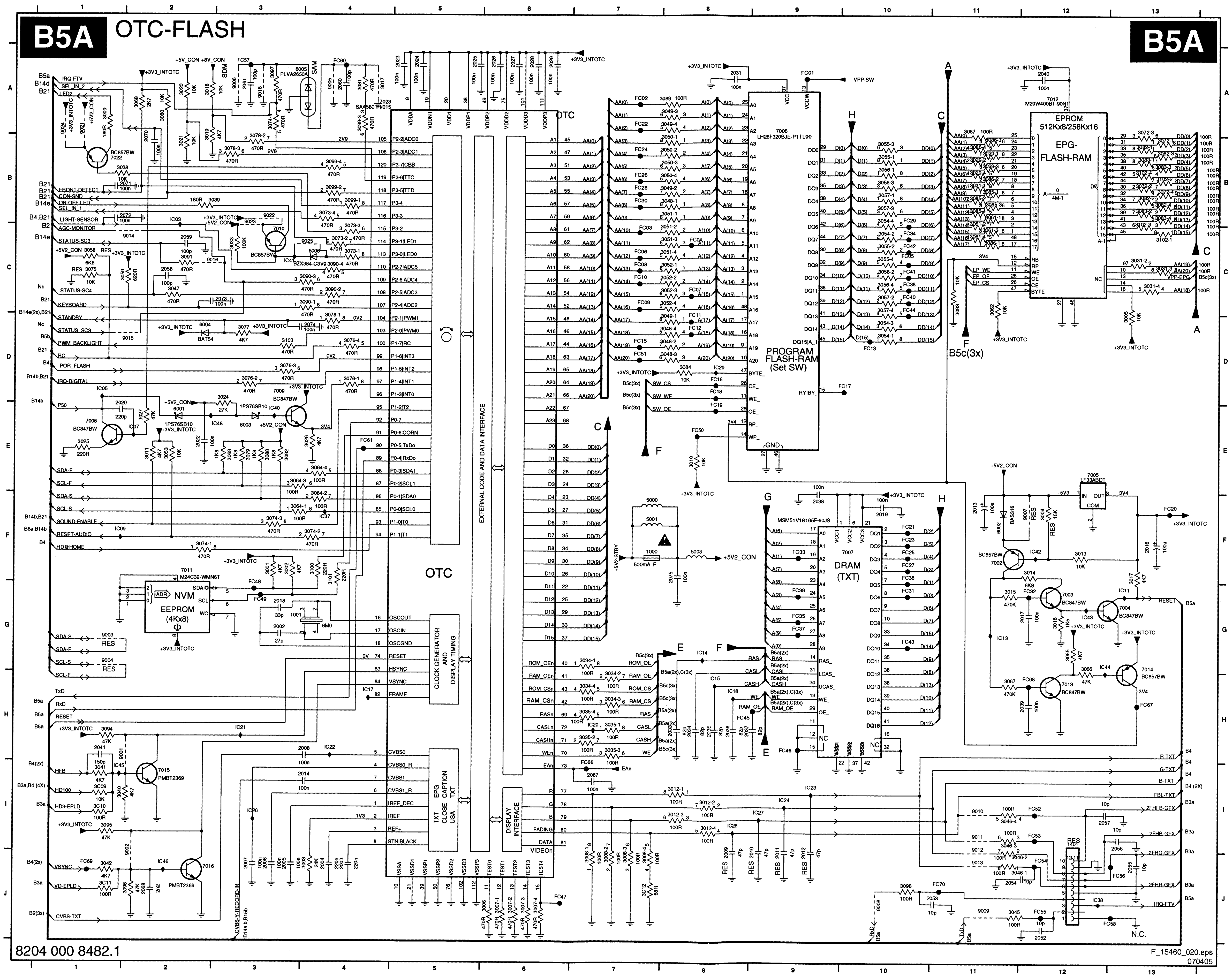
2319	G10
2320	G3
2321	B3
2323	B4
2324	I6
2325	G5
2326	E12
2328	B7
2329	A6
2330	A6
2331	A6
2332	E2
2333	D10
2334	D8
2335	F11
2336	D9
2337	B12
2338	B12
2340	I11
2341	C12
2342	A7
2343	A9
2344	H3
2345	H2
2346	H2
2347	H2
2348	H2
2349	H2
2363	F3
2386	F12
2393	E13
2395	D3
2396	D3
2397	D3
2398	A3
2429	A4
2431	B4
3302	C4
3304	I11
3305	C3
3306	E9
3307	E9
3308	E9
3310	E10
3311	G7
3312	E11
3313	E11
3314	G8
3315	H8
3316	H10
3317	G9
3318	F9
3319	E13
3320	D3
3321	D3
3322	D12
3323	H5
3324	I5
3325	A9
3326	G5
3327	G6
3328	F9
3329	E2
3330	A7
3331	G3
3332	A7
3333	F3
3334	H5
3335	A7
3336	H6
3337	A11
3338	A12
3339	C3
3340	A13
3341	B13
3342	C13
3343	D12
3344	D10
3345	D9
3346	C9
3347	D9
3348	D10
3349	F2
3350	B10
3351	B9
3352	A10
3353	A10
3354	A11
3355	B8
3356	G12
3357	F12
3358	A11
3359	B10
3360	A8
3361	G7
3362	F11
3363	F3
3364-1	F11
3364-2	F11
3364-3	G10
3364-4	G10
3365	F13
3366	H11
3367	F11
3369	B12
3383	B13
3384	C12
3386	F13
3387	G2
3388	B5
3389	C13
3390	D9
3391	F12
3394	D9
3395	C3
3396	D3
3397	D2
3398	D3
3399	B6
3442	E13
3443	E13
3453	C2
3454	B2
3455	C2
3459	B11
3465	A9
3467	A8
3470	A8
3471	A8
3472	I6
5301	E2
5302	E2
5303	G2
5304	G2
5305	G2
5306	H2
5307	H2
5308	H2
5313	A12
5314	B12
5315	C12
6301	E12
6303	H9
6304	H9
6306	I5
6307	I6
6308	C2
6309	D11
6310	D10
6311	D12
6312	H8
6313	H9
6314	H9
6316	C9
6317	E12
6319	D9
6334	H5
7301	B4
7302	A1
7303	H8
7304	F2
7305	B9
7306	A9
7309	G13
7310-1	G11
7310-2	G12
7312	F10
7313	A11
7314	A10
7315	A10
7316	A12
7317	B12
7318	E10
7319	C12
7340	A6
7361	H7
7362	H7
7375	A8
9302	A3
9303	A4
9304	A4
9305	A4
9308	B5
9309	B5
9310	B5
9311	I1
9312	I1
9313	F13
9314	H1
9315	H1
9316	I6
9421	B9
C001	H12
F309	D11
F311	C2
F312	E9
F329	H9
F347	D12
F348	G3
F349	G3
F350	G3
F351	H3
F352	H3
F353	H3
F362	H3
F364	F4
I302	E2
I303	E4
I304	B11
I305	G5
I306	G5
I307	G7
I308	A12
I309	B11
I310	B12
I311	D9
I312	E3
I313	C12
I314	C9
I315	D8
I316	D9
I317	C12
I319	A11
I320	A11
I321	F3
I326	B7
I330	B4
I331	B4
I332	B3
I333	C3
I338	E3
I339	E4
I357	E8
I358	D4
I359	F4
I363	H5
I365	E10
I366	B3
I367	D10
I368	A7
I369	A8
I370	A10
I371	I12
c200	F3

SSB: OTC-Flash


B5A
OTC-FLASH
OTC
EXTERNAL CODE AND DATA INTERFACE
CLOCK GENERATOR AND DISPLAY TIMING
EPG TXT CLOSE CAPTION USA
DISPLAY INTERFACE
NVM EEPROM (4Kx8)
M24C32-WMN6T
PROGRAM FLASH-RAM (Set SW)
LH28F320BJE-PTTL90
EPROM 512Kx8/256Kx16
EPG-FLASH-RAM
M29W400BT-90N1
DRAM (TXT)
MSM51V18165F-60JS
LF33ABDT
BC857BW
BC847BW
PMBT2369
+3V3_INTOTC
+5V2_CON
+5V2_STBY
VPP-SW
B5c(3x)
RESET
IRQ-FTV
B-TXT
G-TXT
R-TXT
FBL-TXT
2FHFB-GFX
2FHB-GFX
2FHG-GFX
2FHR-GFX
N.C.
8204 000 8482.1
F_15460_020.eps
070405

1000 F7
1001 G3
1401 I12
2002 G3
2003 J4
2004 J4
2005 J3
2006 J3
2007 J3
2008 H4
2009 J8
2010 J9
2011 J9
2012 J9
2013 F11
2014 I4
2016 F13
2017 G12
2018 G3
2019 F10
2020 E1
2022 E2
2023 A5
2024 A5
2025 A5
2026 A6
2027 A6
2028 A6
2029 A6
2031 A8
2033 H8
2034 H8
2035 H8
2036 H8
2037 H8
2038 F9
2039 H12
2040 A12
2041 H1
2052 J12
2053 J11
2054 J11
2055 J13
2056 I13
2057 I12
2058 C2
2059 C2
2060 A4
2061 A3
2067 I7
2068 J2
2070 B2
2071 B1
2072 B1
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3002 F3
3003 J4
3004 F12
3005 D13
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3007-4 J6
3008-1 J7
3008-2 J7
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3009 A1
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3011 E2
3012-1 I8
3012-2 I8
3012-3 I8
3012-4 I8
3013 F12
3014 F12
3015 G11
3016 G12
3017 F13
3018 A2
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3026 E4
3027 E2
3029-1 B11
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3029-4 B11
3031-1 B11
3031-2 C13
3031-3 C13
3031-4 C13
3033 C3
3034-1 G7
3034-2 H7
3034-3 H7
3034-4 H7
3035-1 H7
3035-2 H7
3035-3 H7
3035-4 H7
3038 B1
3039 B2
3040 I1
3041 I1
3042 J1
3045 J11
3046-1 J12
3046-2 J12
3046-3 I11
3046-4 I11
3047 C2
3048-1 B8
3048-2 D8
3048-3 D8
3048-4 D8
3049-1 D8
3049-2 B8
3049-3 A8
3049-4 A8
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3057-4 C10
3058 C1
3059 C1
3061-1 B11
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3061-4 C11
3062 C11
3064-1 F3
3064-2 F4
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3064-4 E4
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3066 G12
3067 H11
3068 A2
3069 E3
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3072-3 A13
3072-4 B13
3073-1 C4
3073-2 C4
3073-3 C4
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3091 C2
3092 E3
3093 C11
3094 H1
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3096 J2
3097 A3
3098 J10
3099-1 B4
3099-2 B4
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3099-4 B4
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3101 F4
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3102-2 B13
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3102-4 B13
3103 D3
3C09 I1
3C10 I1
3C11 J1
3C12 J7
5000 F7
5001 F7
5003 F8
6001 E2
6002 F11
6003 E3
6004 D2
6005 A3
6006 C4
7002 F11
7003 G12
7004 G13
7005 E12
7006 A9
7007 F10
7008 E1
7009 D3
7010 C3
7011 F2
7012 A12
7013 H12
7014 G13
7015 I2
7016 J2
7022 B1
7023 A4
9001 H2
9002 J2
9003 G1
9004 G1
9005 A4
9006 A3
9007 F12
9008 J10
9009 J11
9010 I11
9011 I11
9012 I11
9013 J11
9014 C2
9015 D2
9016 C2
9017 A4
9018 A3
9021 A1
9022 B3
9023 B3
9024 A1
9025 C4
FC01 A9
FC02 A7
FC03 C7
FC04 C8
FC05 C10
FC06 C7
FC07 C8
FC08 C7
FC09 C7
FC10 C7
FC11 D8
FC12 D8
FC13 D10
FC15 D7
FC16 D8
FC17 D10
FC18 D8
FC19 E8
FC20 F13
FC21 F10
FC22 A7
FC23 F10
FC24 B7
FC25 F10
FC26 B7
FC27 F10
FC28 B7
FC29 B10
FC30 B7
FC31 G10
FC32 G12
FC33 F9
FC34 C10
FC35 G9
FC36 F10
FC37 G9
FC38 C10
FC39 G9
FC40 C10
FC41 C10
FC42 C10
FC43 G10
FC44 C10
FC45 H8
FC46 H9
FC47 J6
FC48 G3
FC49 G3
FC50 E8
FC51 D7
FC52 I12
FC53 I12
FC54 J12
FC55 J12
FC56 J13
FC57 A3
FC58 J13
FC60 A4
FC61 E4
FC66 I7
FC67 H13
FC68 H12
FC69 J1
FC70 J11
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IC07 E2
IC09 F1
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IC14 G8
IC15 H8
IC17 H4
IC18 H8
IC20 H7
IC21 H3
IC22 H4
IC23 I9
IC24 I9
IC26 I3
IC27 I9
IC28 I8
IC29 D8
IC37 F4
IC38 J12
IC40 E3
IC41 C3
IC42 F12
IC43 G12
IC44 G12
IC45 I1
IC46 J2
IC48 E3

SSB: Backlight Control

2063 C3	3023 C1	3030 B2	3036 B4	3070 C3	7021-1 B4	9019 C4	IC50 B4	IC52 B2
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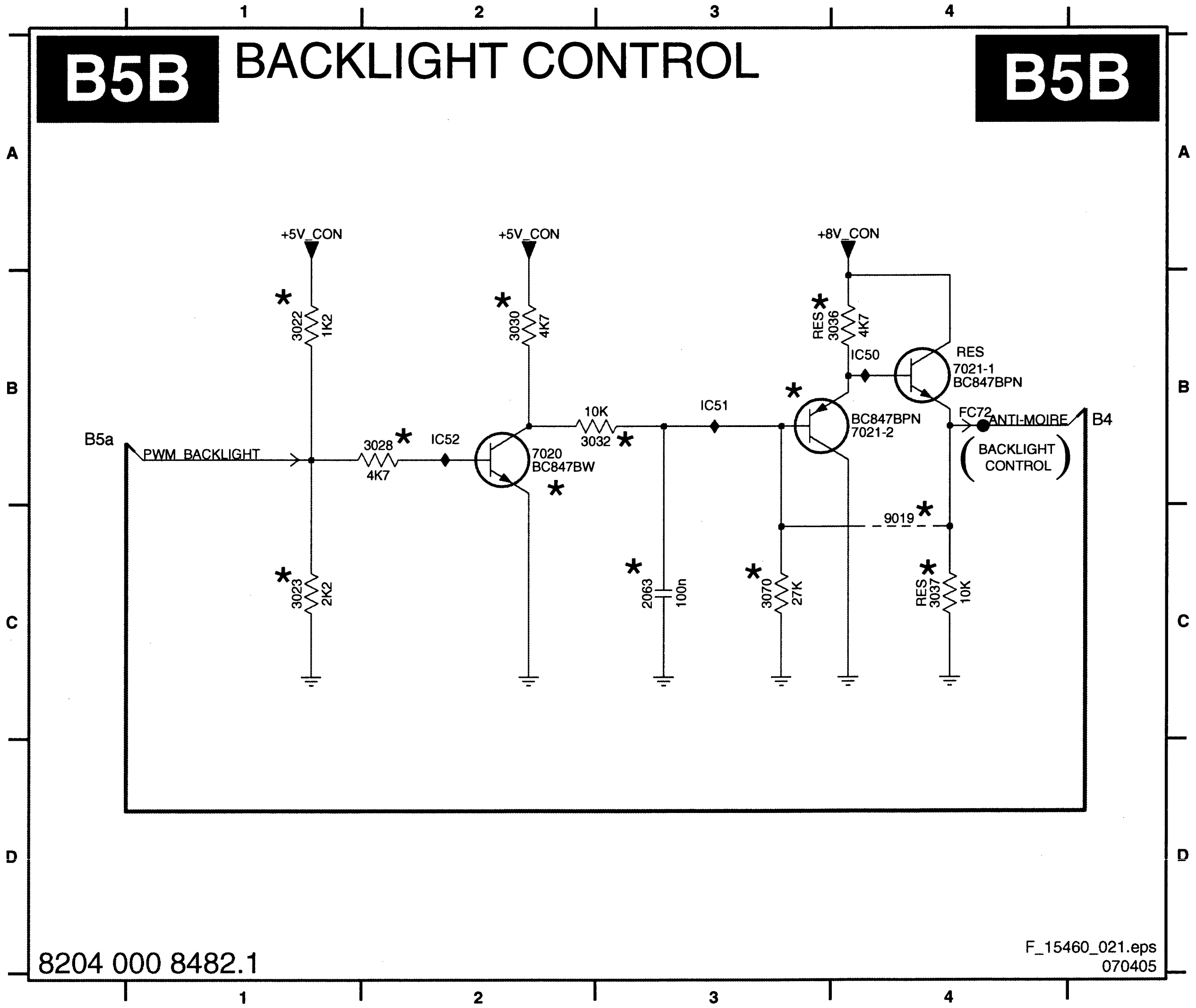
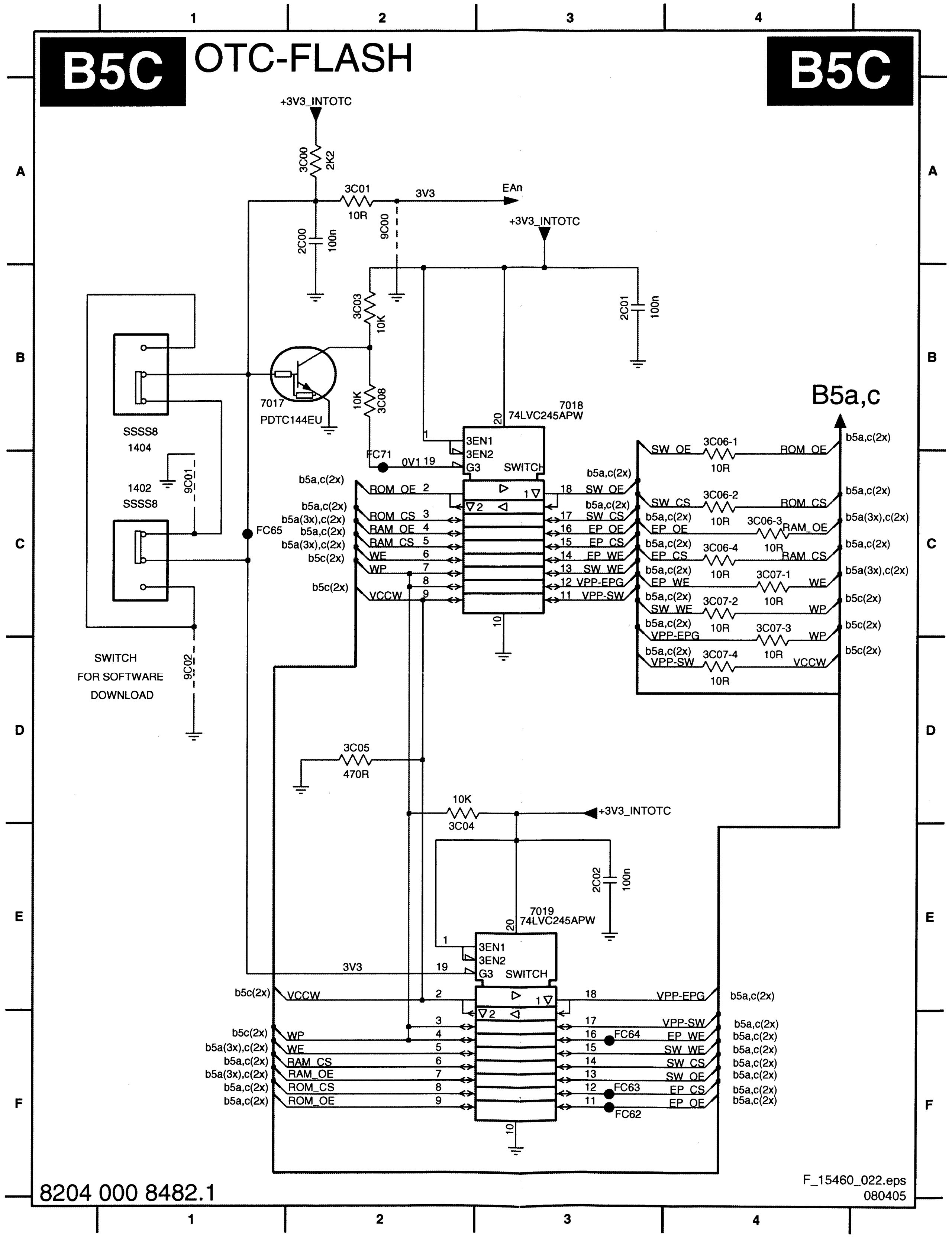

B5B
BACKLIGHT CONTROL
B5B
+5V_CON
+5V_CON
+8V_CON
3022 1K2
3030 4K7
RES 3036 4K7
IC50
RES 7021-1 BC847BPN
B5a
PWM_BACKLIGHT
3028 4K7
IC52
7020 BC847BW
10K 3032
IC51
BC847BPN 7021-2
FC72
ANTI-MOIRE
B4
BACKLIGHT CONTROL
9019
3023 2K2
2063 100n
3070 27K
RES 3037 10K
8204 000 8482.1
F_15460_021.eps
070405
A
B
C
D
1
2
3
4

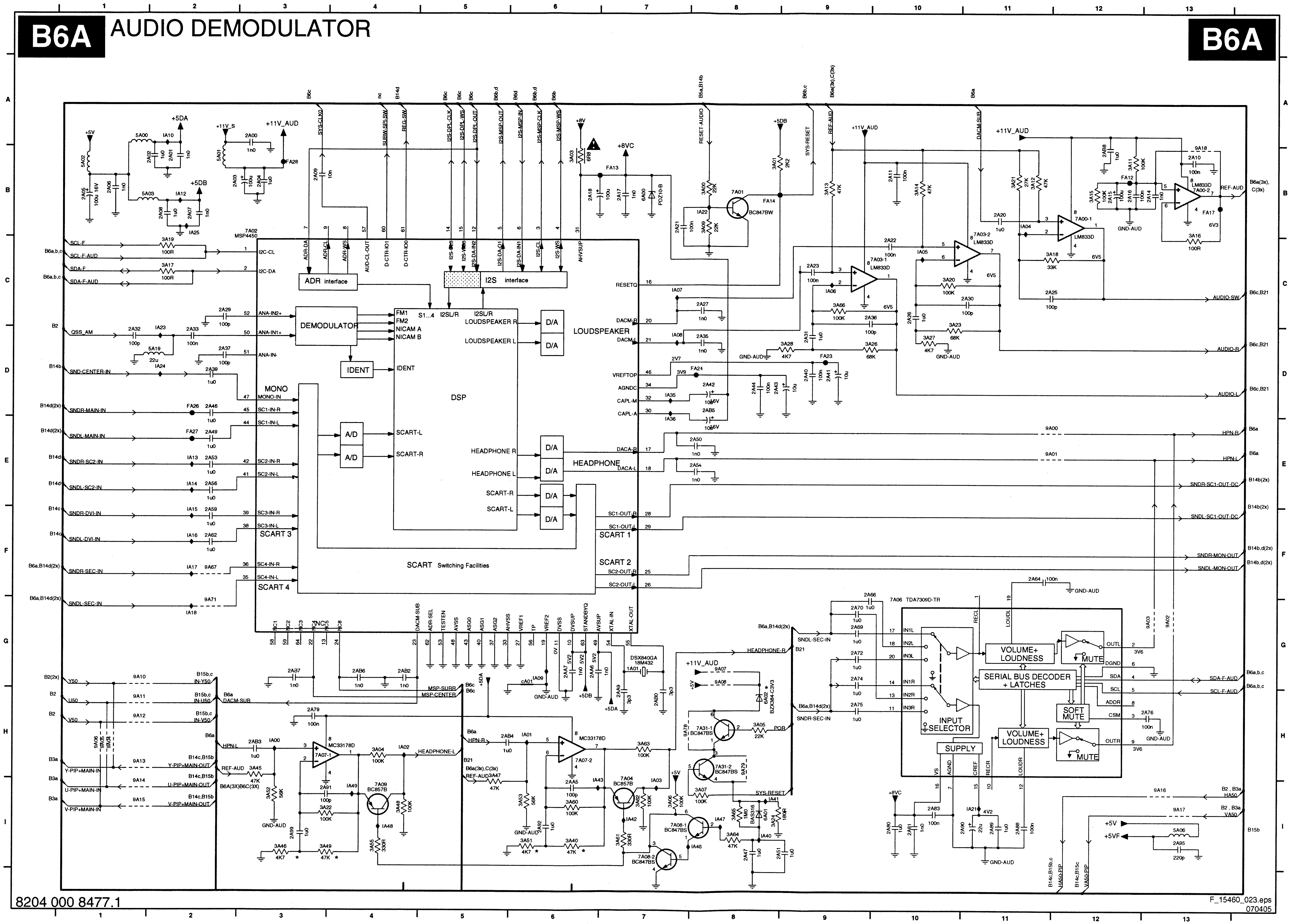
SSB: OTC-Flash

1402 C1	2C01 B3	3C01 A2	3C05 D2	3C06-3 C4	3C07-2 C4	3C08 B2	7019 E3	9C02 D1	FC64 F3
1404 B1	2C02 E3	3C03 B2	3C06-1 B4	3C06-4 C4	3C07-3 C4	7017 B1	9C00 A2	FC62 F3	FC65 C1
2C00 A2	3C00 A2	3C04 D2	3C06-2 C4	3C07-1 C4	3C07-4 D4	7018 B3	9C01 C1	FC63 F3	FC71 C2


B5C
OTC-FLASH
B5C
+3V3_INTOTC
3C00 2K2
3C01 10R
3V3
EAn
+3V3_INTOTC
2C00 100n
9C00
3C03 10K
2C01 100n
3C08 10K
7017 PDTC144EU
SSSS8 1404
1402 SSSS8
9C01
FC71
0V1
FC65
7018 74LVC245APW
3EN1
3EN2
G3
SWITCH
B5a,c
ROM_OE
ROM_CS
RAM_OE
RAM_CS
WE
WP
VCCW
SW_OE
SW_CS
EP_OE
EP_CS
EP_WE
SW_WE
VPP-EPG
VPP-SW
3C06-1 10R
3C06-2 10R
3C06-3 10R
3C06-4 10R
3C07-1 10R
3C07-2 10R
3C07-3 10R
3C07-4 10R
b5a,c(2x)
b5a(3x),c(2x)
b5c(2x)
SWITCH FOR SOFTWARE DOWNLOAD
9C02
3C05 470R
10K 3C04
+3V3_INTOTC
2C02 100n
7019 74LVC245APW
3V3
FC64
FC63
FC62
8204 000 8482.1
F_15460_022.eps
080405
A
B
C
D
E
F
1
2
3
4

SSB: Audio Demodulator

B6A AUDIO DEMODULATOR


B6A
B6A
1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
+5DA
+11V_S
+11V_AUD
+5DB
+8V
+8VC
+5V
5A00
5A01
5A02
5A03
2A00
2A01
2A02
2A03
2A04
2A05
2A06
2A07
2A08
2A09
IA10
IA12
IA25
FA28
FA13
7A02
MSP4450
ADR interface
I2S interface
DEMODULATOR
IDENT
DSP
MONO
A/D
D/A
LOUDSPEAKER
HEADPHONE
SCART 1
SCART 2
SCART 3
SCART 4
SCART Switching Facilities
FM1
FM2
NICAM A
NICAM B
S1...4
I2SL/R
LOUDSPEAKER R
LOUDSPEAKER L
SCART-L
SCART-R
HEADPHONE R
HEADPHONE L
SCART-R
SCART-L
RESETQ
DACM-R
DACM-L
VREFTOP
AGNDC
CAPL-M
CAPL-A
DACA-R
DACA-L
SC1-OUT-R
SC1-OUT-L
SC2-OUT-R
SC2-OUT-L
I2C-CL
I2C-DA
ANA-IN2+
ANA-IN1+
ANA-IN-
MONO-IN
SC1-IN-R
SC1-IN-L
SC2-IN-R
SC2-IN-L
SC3-IN-R
SC3-IN-L
SC4-IN-R
SC4-IN-L
SCL-F
SCL-F-AUD
SDA-F
SDA-F-AUD
QSS_AM
SND-CENTER-IN
SNDR-MAIN-IN
SNDL-MAIN-IN
SNDR-SC2-IN
SNDL-SC2-IN
SNDR-DVI-IN
SNDL-DVI-IN
SNDR-SEC-IN
SNDL-SEC-IN
SYS-CLK0
SUBW-SPI-SW
REG-SW
I2S-DPL-CLK
I2S-DPL-WS
I2S-DPL-OUT
I2S-MSP-OUT
I2S-MSP-IN
I2S-MSP-CLK
I2S-MSP-WS
RESET-AUDIO
SYS-RESET
REF-AUD
DACM-SUB
7A01
BC847BW
7A03-1
7A03-2
LM833D
7A00-1
7A00-2
LM833D
AUDIO-SW
AUDIO-R
AUDIO-L
HPN-R
HPN-L
SNDR-SC1-OUT-DC
SNDL-SC1-OUT-DC
SNDR-MON-OUT
SNDL-MON-OUT
GND-AUD
9A00
9A01
9A18
DSX840GA 18M432
XTAL-IN
XTAL-OUT
DACM-SUB
ADR-SEL
TESTEN
AVSS
ASG1
ASG2
AHVSS
VREF1
TP
VREF2
DVSS
DVSUP
STANDBYQ
AVSUP
7A06 TDA7309D-TR
IN1L
IN2L
IN3L
IN1R
IN2R
IN3R
INPUT SELECTOR
VOLUME+ LOUDNESS
SERIAL BUS DECODER + LATCHES
SOFT MUTE
MUTE
SUPPLY
OUTL
DGND
SDA
SCL
ADDR
CSM
OUTR
SDA-F-AUD
SCL-F-AUD
SNDL-SEC-IN
SNDR-SEC-IN
HEADPHONE-R
HEADPHONE-L
7A07-1
7A07-2
MC33178D
7A09
BC857B
7A04
BC857B
7A31-1
7A31-2
BC847BS
7A08-1
7A08-2
BC847BS
6A02
BZX384-C3V3
6A01
BAS316
POR
SYS-RESET
Y50
U50
V50
Y-PIP+MAIN-OUT
U-PIP+MAIN-OUT
V-PIP+MAIN-OUT
Y-PIP+MAIN-IN
U-PIP+MAIN-IN
V-PIP+MAIN-IN
MSP-SUBB
MSP-CENTER
DACM-SUB
HA50
VA50
+5V
+5VF
5A06
9A16
9A17
B14c,B15b,c
B14c,B15c

8204 000 8477.1

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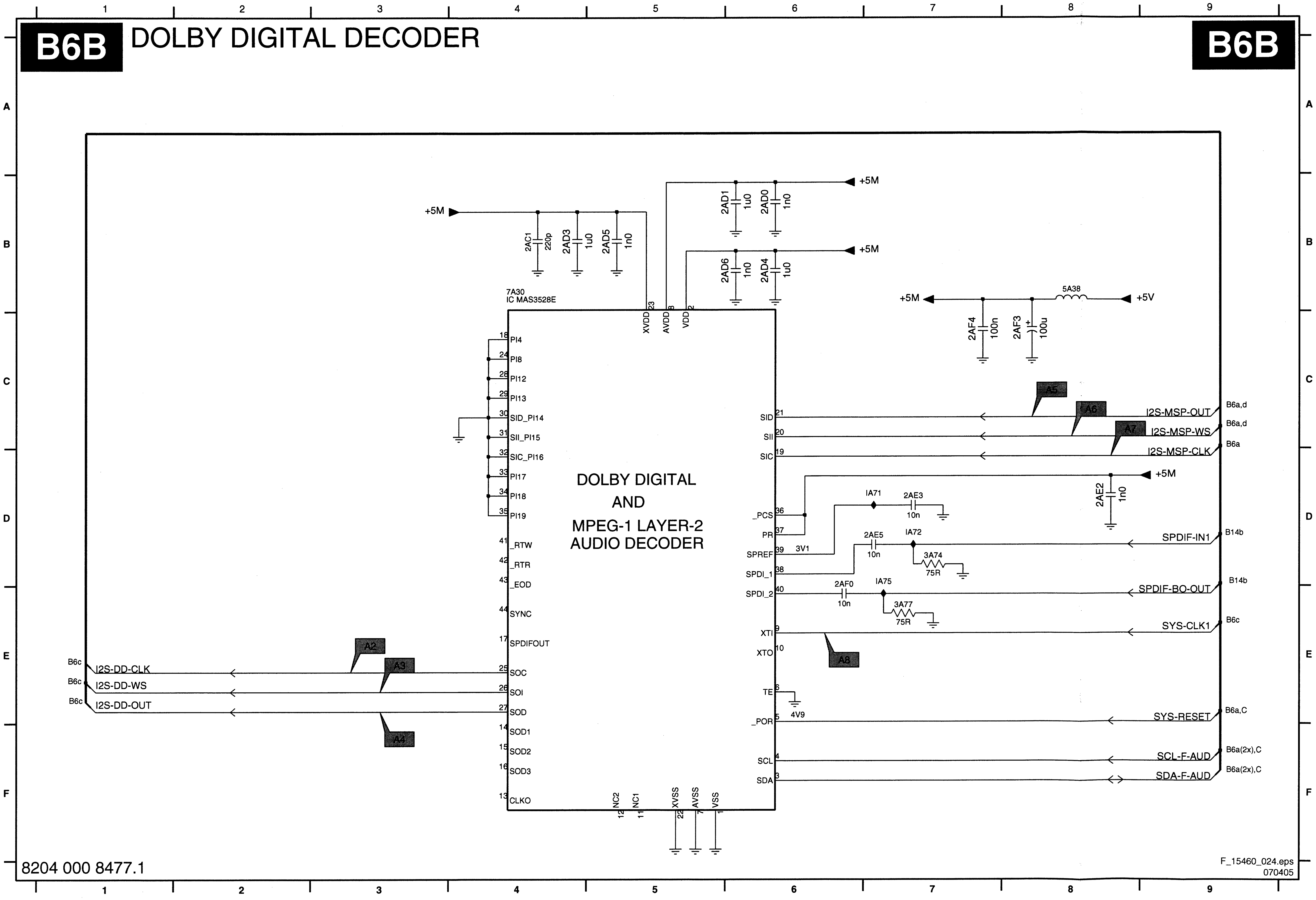
1A00	G7
1A01	G7
2A00	A3
2A01	B2
2A02	B2
2A03	B2
2A04	B3
2A05	B1
2A06	B1
2A07	B2
2A08	B2
2A09	B3
2A10	B13
2A11	B10
2A14	B13
2A15	B12
2A16	B12
2A17	B7
2A18	B6
2A20	B11
2A21	B7
2A22	C10
2A23	C9
2A25	C11
2A26	C10
2A27	C8
2A29	C2
2A30	C11
2A31	D9
2A32	D1
2A33	D2
2A35	D8
2A36	C9
2A37	D2
2A39	D2
2A40	D9
2A41	D9
2A42	D8
2A43	D8
2A44	D8
2A46	D2
2A47	I8
2A49	E2
2A50	E8
2A51	I9
2A53	E2
2A54	E8
2A56	E2
2A59	F2
2A62	F2
2A64	F11
2A66	F9
2A69	G9
2A70	G9
2A72	G9
2A74	G9
2A75	H9
2A76	H13
2A79	H3
2A80	I10
2A81	I10
2A83	I10
2A88	I11
2A89	I11
2A90	I11
2A91	I3
2A92	I6
2A95	I13
2A99	I3
2AA5	I6
2AA6	G6
2AA7	G6
2AA9	H7
2AB0	H7
2AB2	G4
2AB3	H3
2AB4	H5
2AB5	D8
2AB6	G4
2AB7	G3
2AB8	B12
3A00	B8
3A01	B8
3A03	B6
3A04	H4
3A05	H8
3A06	I7
3A07	I8
3A09	B8
3A11	B12
3A12	B11
3A13	B9
3A14	B10
3A15	B12
3A16	B13
3A17	C2
3A18	C11
3A19	C2
3A20	C10
3A21	B11
3A22	I3
3A23	C10
3A24	I8
3A26	D9
3A27	D10
3A28	D9
3A40	I6
3A45	H3
3A46	I3
3A47	H5
3A48	I4
3A49	I3
3A51	I6
3A52	I3
3A53	I6
3A55	I4
3A60	I6
3A61	I7
3A62	I7
3A63	H7
3A64	I8
3A65	I8
3A66	C9
5A00	A1
5A01	B2
5A02	B1
5A03	B1
5A06	I13
5A19	D2
6A00	B7
6A01	I8
6A02	H8
7A00-1	B12
7A00-2	B13
7A01	B8
7A02	B3
7A03-1	C9
7A03-2	B11
7A04	I7
7A06	G10
7A07-1	H3
7A07-2	H6
7A08-1	I7
7A08-2	I7
7A09	I4
7A31-1	H8
7A31-2	H8
9A00	E11
9A01	E11
9A02	G13
9A03	G13
9A04	H1
9A05	H1
9A06	H1
9A07	G8
9A08	G8
9A10	G1
9A11	H1
9A12	H1
9A13	H1
9A14	I1
9A15	I1
9A16	I13
9A17	I13
9A18	B13
9A67	F2
9A71	G2
9A78	H7
9A79	H8
FA12	B12
FA13	B7
FA14	B8
FA17	B13
FA23	D9
FA24	D8
FA26	D2
FA27	E2
FA28	B3
IA00	H3
IA01	H6
IA02	H4
IA03	I7
IA04	B11
IA05	C10
IA06	C9
IA07	C7
IA08	D7
IA09	G6
IA10	A2
IA12	B2
IA13	E2
IA14	E2
IA15	F2
IA16	F2
IA17	F2
IA18	G2
IA21	I11
IA22	B8
IA23	D2
IA24	D2
IA25	B2
IA35	D7
IA36	E7
IA40	I8
IA41	I8
IA42	I7
IA43	I6
IA46	I8
IA47	I8
IA48	I4
IA49	I4
cA01	G6

SSB: Dolby Digital Decoder


B6B
DOLBY DIGITAL DECODER
B6B
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
+5M
2AC1
220p
2AD3
1u0
2AD5
1n0
+5M
2AD1
1u0
2AD0
1n0
+5M
2AD6
1n0
2AD4
1u0
7A30
IC MAS3528E
XVDD 23
AVDD 8
VDD 2
+5M
5A38
+5V
2AF4
100n
2AF3
100u
18 PI4
24 PI8
28 PI12
29 PI13
30 SID_PI14
31 SII_PI15
32 SIC_PI16
33 PI17
34 PI18
35 PI19
41 _RTW
42 _RTR
43 _EOD
44 SYNC
17 SPDIFOUT
25 SOC
26 SOI
27 SOD
14 SOD1
15 SOD2
16 SOD3
13 CLKO
DOLBY DIGITAL
AND
MPEG-1 LAYER-2
AUDIO DECODER
NC2 12
NC1 11
XVSS 22
AVSS 7
VSS 1
SID 21
SII 20
SIC 19
_PCS 36
PR 37
SPREF 39
SPDI_1 38
SPDI_2 40
XTI 9
XTO 10
TE 6
_POR 5
SCL 4
SDA 3
3V1
4V9
A5
A6
A7
A8
I2S-MSP-OUT
B6a,d
I2S-MSP-WS
B6a,d
I2S-MSP-CLK
B6a
+5M
2AE2
1n0
IA71
2AE3
10n
2AE5
10n
IA72
3A74
75R
SPDIF-IN1
B14b
2AF0
10n
IA75
3A77
75R
SPDIF-BO-OUT
B14b
SYS-CLK1
B6c
SYS-RESET
B6a,C
SCL-F-AUD
B6a(2x),C
SDA-F-AUD
B6a(2x),C
A2
A3
A4
B6c
I2S-DD-CLK
B6c
I2S-DD-WS
B6c
I2S-DD-OUT
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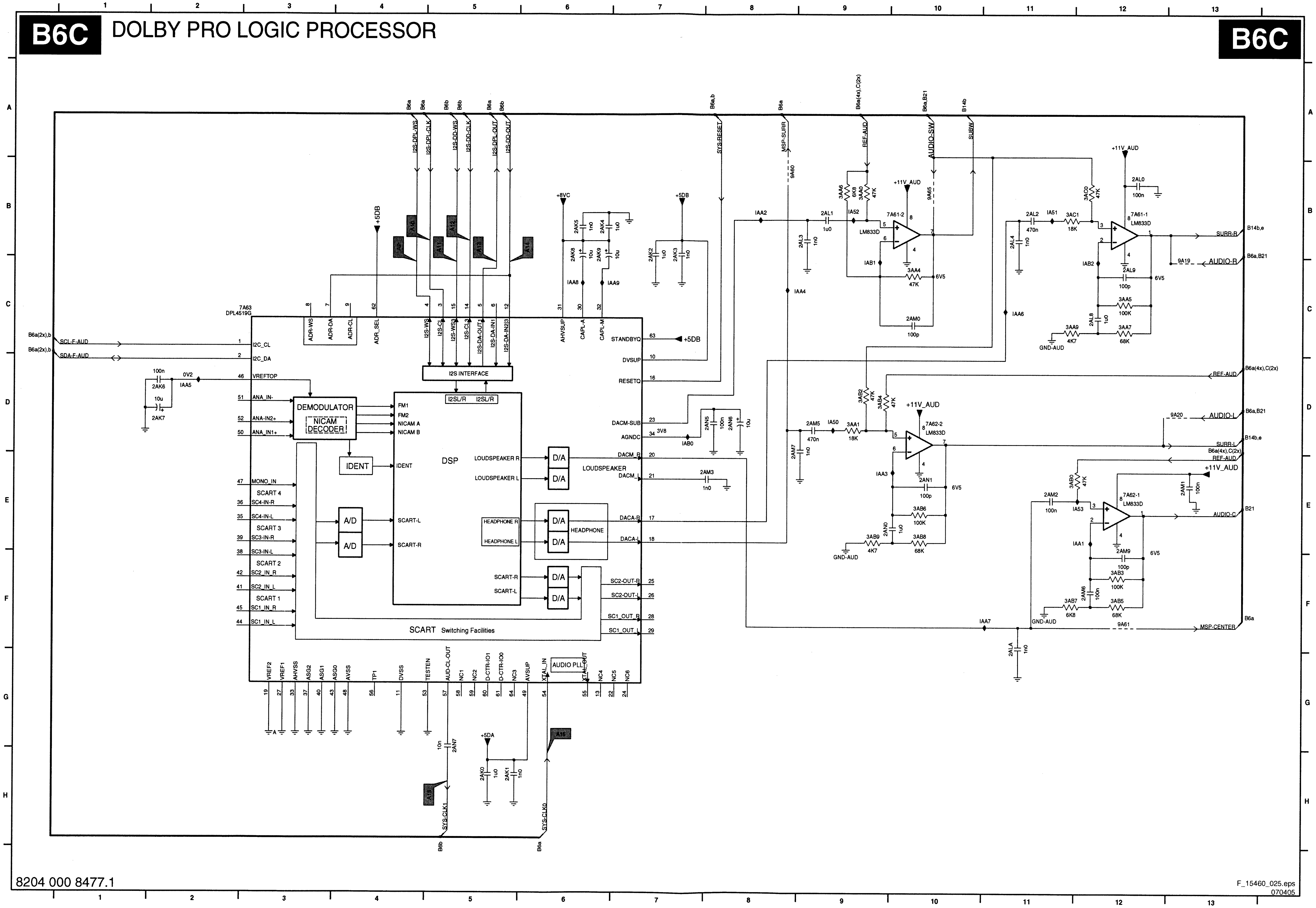
2AC1	B4
2AD0	B6
2AD1	B6
2AD3	B4
2AD4	B6
2AD5	B5
2AD6	B6
2AE2	D8
2AE3	D7
2AE5	D7
2AF0	E6
2AF3	C8
2AF4	C7
3A74	D7
3A77	E7
5A38	B8
7A30	B4
IA71	D7
IA72	D7
IA75	D7

SSB: Dolby Pro Logic Processor


B6C
DOLBY PRO LOGIC PROCESSOR
B6C
7A63
DPL4519G
I2C_CL
I2C_DA
VREFTOP
ANA_IN-
ANA_IN2+
ANA_IN1+
MONO_IN
SCART 4
SC4-IN-R
SC4-IN-L
SCART 3
SC3-IN-R
SC3-IN-L
SCART 2
SC2_IN_R
SC2_IN_L
SCART 1
SC1_IN_R
SC1_IN_L
DEMODULATOR
NICAM
DECODER
IDENT
A/D
FM1
FM2
NICAM A
NICAM B
SCART-L
SCART-R
DSP
I2S INTERFACE
I2SL/R
LOUDSPEAKER R
LOUDSPEAKER L
LOUDSPEAKER
HEADPHONE R
HEADPHONE L
HEADPHONE
D/A
SCART Switching Facilities
AUDIO PLL
ADR-WS
ADR-DA
ADR-CL
ADR_SEL
I2S-WS
I2S-CL
I2S-WS3
I2S-CL3
I2S-DA-OUT1
I2S-DA-IN1
I2S-DA-IN2/3
AHVSUP
CAPL-A
CAPL-M
STANDBYQ
DVSUP
RESETQ
DACM-SUB
AGNDC
DACM_R
DACM_L
DACA-R
DACA-L
SC2-OUT-R
SC2-OUT-L
SC1_OUT_R
SC1_OUT_L
VREF2
VREF1
AHVSS
ASG2
ASG1
ASG0
AVSS
TP1
DVSS
TESTEN
AUD-CL-OUT
NC1
NC2
D-CTR-IO1
D-CTR-IO0
NC3
AVSUP
XTAL_IN
XTAL_OUT
NC4
NC5
NC6
SCL-F-AUD
SDA-F-AUD
B6a(2x),b
I2S-DPL-WS
I2S-DPL-CLK
I2S-DD-WS
I2S-DD-CLK
I2S-DPL-OUT
I2S-DD-OUT
SYS-RESET
MSP-SURR
REF-AUD
AUDIO-SW
SUBW
+5DB
+8VC
+5DA
+11V_AUD
0V2
3V8
6V5
7A61-1
7A61-2
7A62-1
7A62-2
LM833D
SURR-R
AUDIO-R
REF-AUD
AUDIO-L
SURR-L
AUDIO-C
MSP-CENTER
GND-AUD
SYS-CLK1
SYS-CLK0
B6a
B6b
B6a,b
B6a(4x),C(2x)
B6a,B21
B14b
B14b,e
B21
2AK0
2AK1
2AK2
2AK3
2AK4
2AK5
2AK6
2AK7
2AK8
2AK9
2AL0
2AL1
2AL2
2AL3
2AL4
2AL8
2AL9
2ALA
2AM0
2AM1
2AM2
2AM3
2AM5
2AM6
2AM7
2AM9
2AN0
2AN1
2AN5
2AN6
2AN7
3AA0
3AA1
3AA4
3AA5
3AA6
3AA7
3AA9
3AB0
3AB2
3AB3
3AB4
3AB5
3AB6
3AB7
3AB8
3AB9
3AC0
3AC1
9A19
9A20
9A60
9A61
9A65
IA50
IA51
IA52
IA53
IAA1
IAA2
IAA3
IAA4
IAA5
IAA6
IAA7
IAA8
IAA9
IAB0
IAB1
IAB2
100n
10u
1n0
1u0
470n
100p
10n
18K
47K
100K
68K
4K7
6K8
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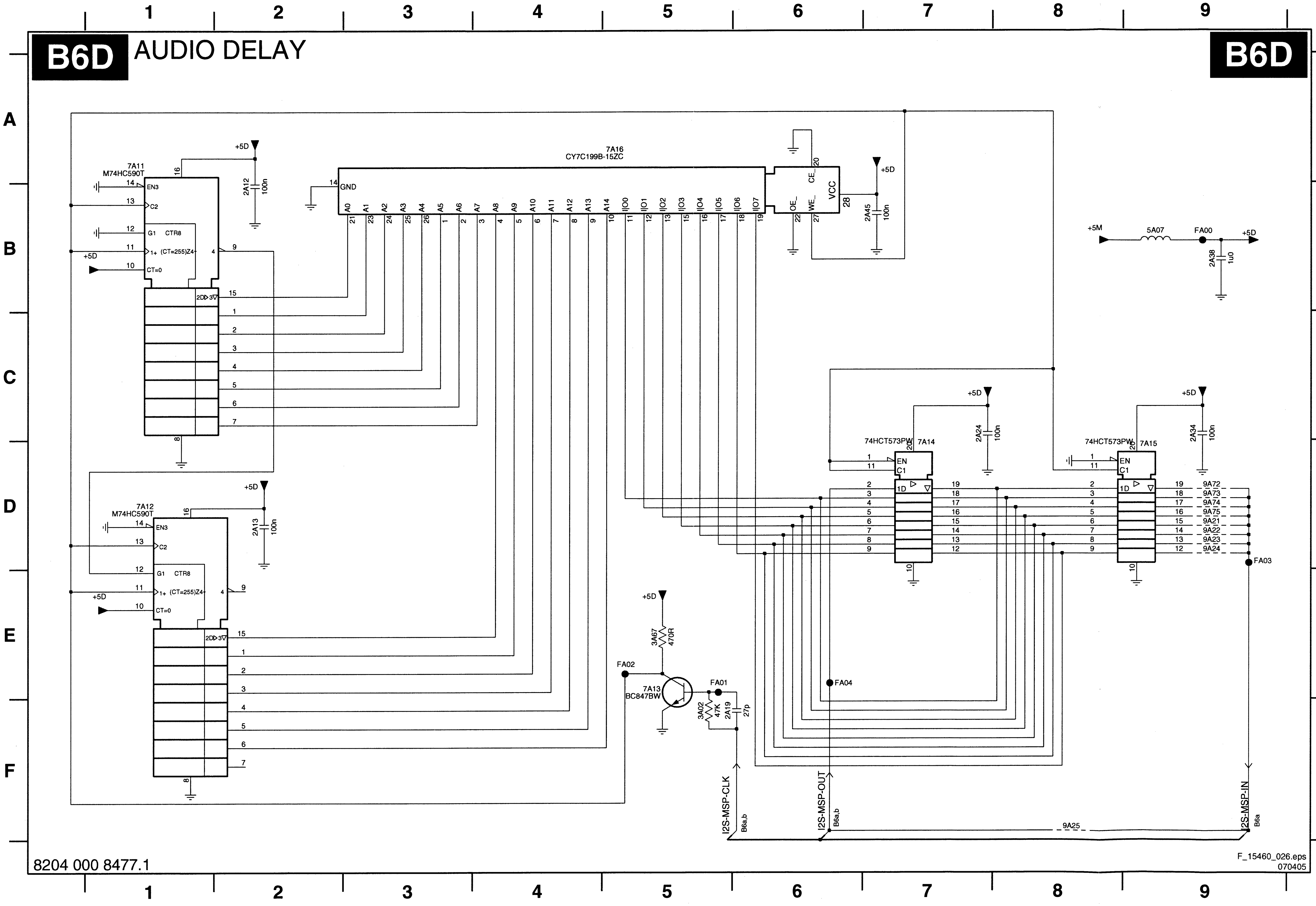
2AK0	G5
2AK1	G5
2AK2	B7
2AK3	B7
2AK4	B6
2AK5	B6
2AK6	D2
2AK7	D2
2AK8	B6
2AK9	B6
2AL0	B12
2AL1	B9
2AL2	B11
2AL3	B9
2AL4	B11
2AL8	C12
2AL9	C12
2ALA	F11
2AM0	C10
2AM1	E13
2AM2	E11
2AM3	E7
2AM5	D9
2AM6	F12
2AM7	D8
2AM9	E12
2AN0	E9
2AN1	E10
2AN5	D7
2AN6	D8
2AN7	G5
3AA0	B9
3AA1	D9
3AA4	C10
3AA5	C12
3AA6	B9
3AA7	C12
3AA9	C11
3AB0	E11
3AB2	D9
3AB3	F12
3AB4	D9
3AB5	F12
3AB6	E10
3AB7	F11
3AB8	E10
3AB9	E9
3AC0	B12
3AC1	B11
7A61-A	B12
7A61-B	B10
7A62-A	E12
7A62-B	D10
7A63	C3
9A19	C13
9A20	D13
9A60	B8
9A61	F12
9A65	B10
IA50	D9
IA51	B11
IA52	B9
IA53	E12
IAA1	E12
IAA2	B8
IAA3	E9
IAA4	C9
IAA5	D2
IAA6	C11
IAA7	F11
IAA8	C6
IAA9	C7
IAB0	D7
IAB1	C9
IAB2	C12

SSB: Audio Delay


B6D
AUDIO DELAY
B6D
7A11
M74HC590T
7A12
M74HC590T
EN3
C2
G1 CTR8
1+ (CT=255)Z4
CT=0
+5D
7A16
CY7C199B-15ZC
GND
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14
IO0 IO1 IO2 IO3 IO4 IO5 IO6 IO7
CE_
OE_
WE_
VCC
2A12 100n
2A13 100n
2A45 100n
+5M
5A07
FA00
2A38 1u0
74HCT573PW 7A14
74HCT573PW 7A15
EN
C1
1D
2A24 100n
2A34 100n
9A72
9A73
9A74
9A75
9A21
9A22
9A23
9A24
FA03
FA04
3A67 470R
FA02
7A13 BC847BW
FA01
3A02 47K
2A19 27p
I2S-MSP-CLK
B6a,b
I2S-MSP-OUT
B6a,b
9A25
I2S-MSP-IN
B6a
A B C D E F
1 2 3 4 5 6 7 8 9
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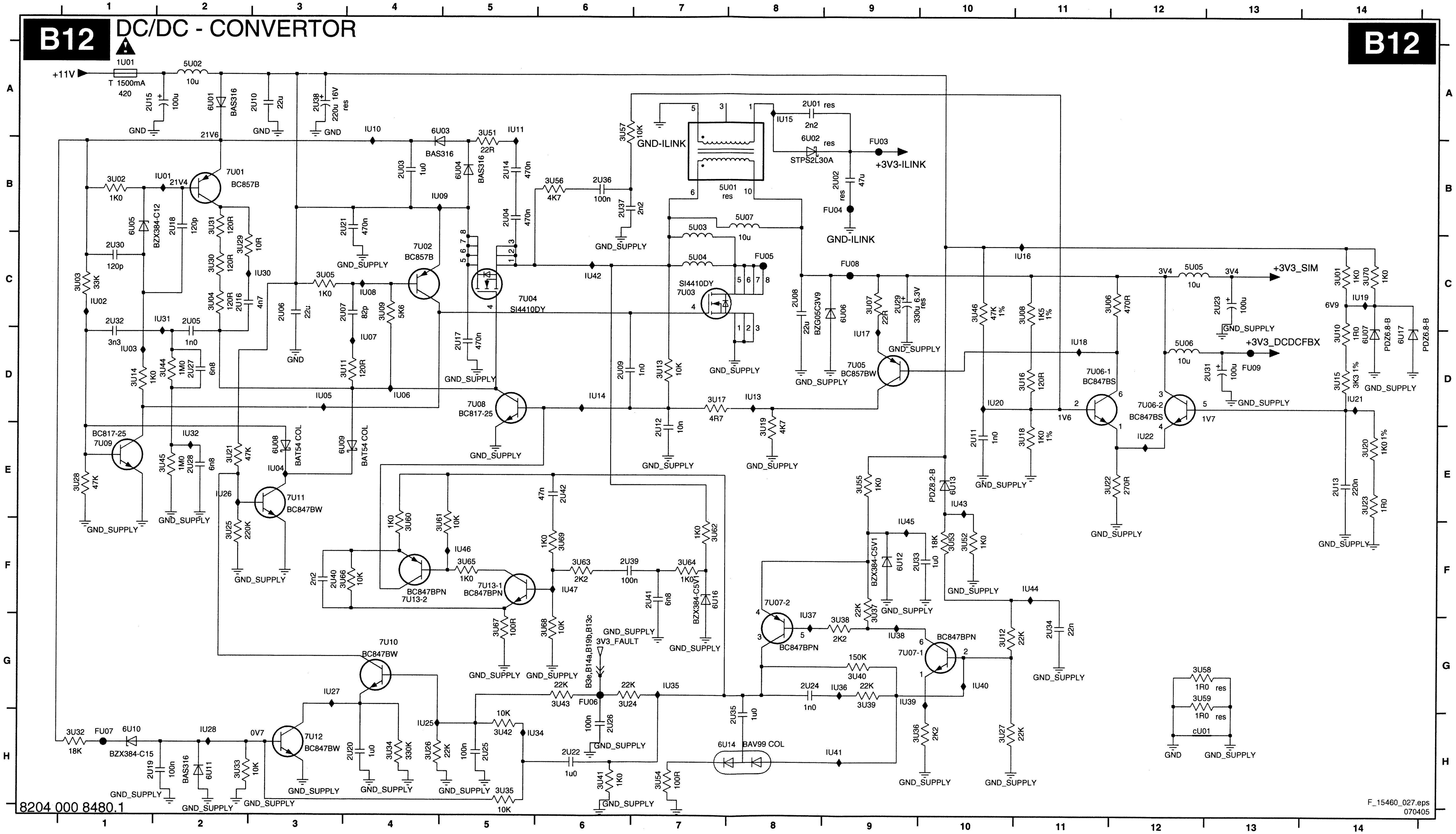
070405

2A12	B2
2A13	D2
2A19	F5
2A24	C7
2A34	C9
2A38	B9
2A45	B7
3A02	F5
3A67	E5
5A07	B9
7A11	A1
7A12	D1
7A13	E5
7A14	D7
7A15	D9
7A16	A5
9A21	D9
9A22	D9
9A23	D9
9A24	D9
9A25	F8
9A72	D9
9A73	D9
9A74	D9
9A75	D9
FA00	B9
FA01	E5
FA02	E5
FA03	D9
FA04	E6

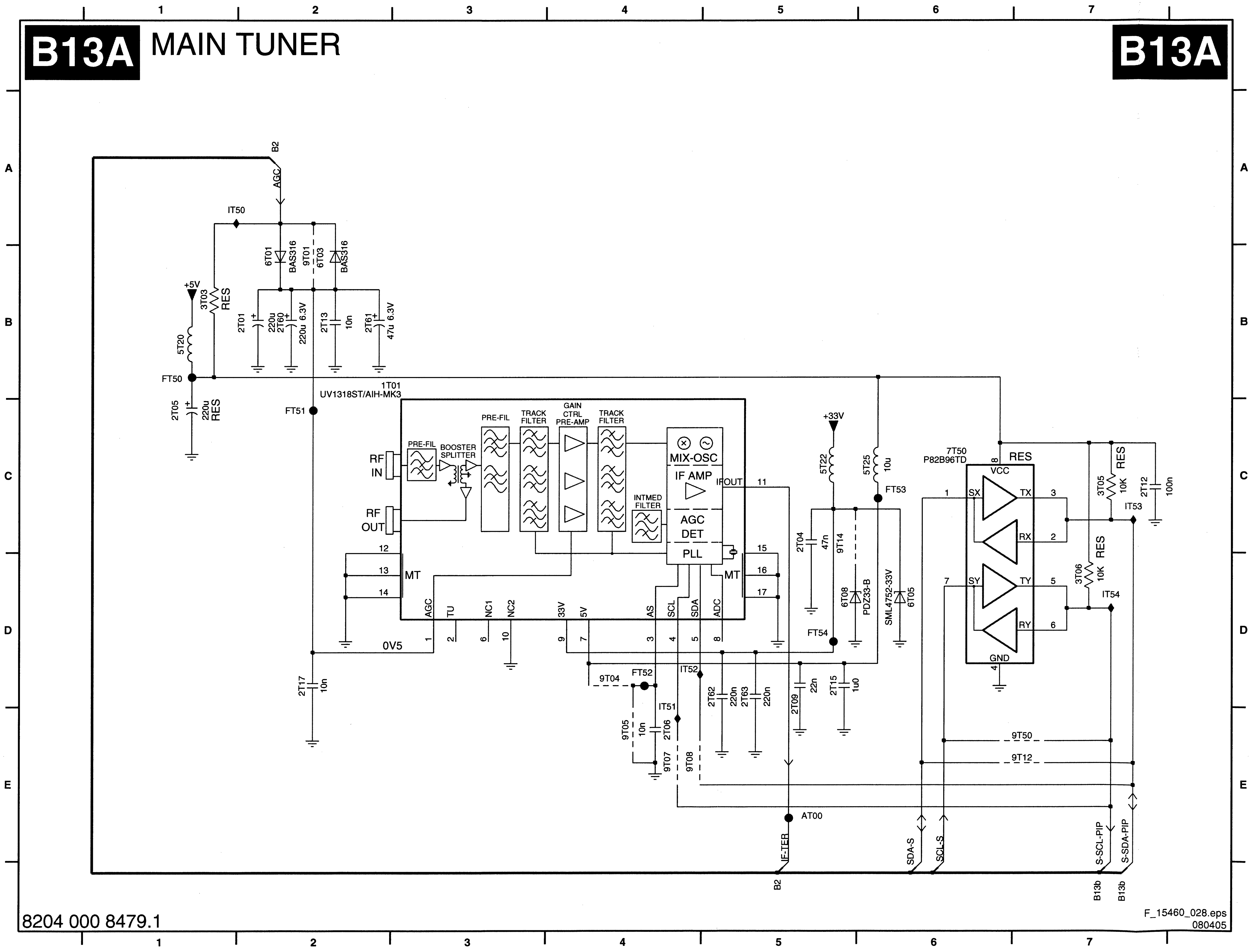
SSB: DC/DC Convertor

1U01 A1
2U01 A8
2U02 B9
2U03 B4
2U04 B5
2U05 C2
2U06 C3
2U07 C3
2U08 C8
2U09 D6
2U10 A3
2U11 E10
2U12 E7
2U13 E14
2U14 B5
2U15 A1
2U16 C2
2U17 D5
2U18 B2
2U19 H1
2U20 H4
2U21 B3
2U22 H6
2U23 C13
2U24 G8
2U25 H5
2U26 H6
2U27 D2
2U28 E2
2U29 C9
2U30 C1
2U31 D13
2U32 C1
2U33 F10
2U34 G11
2U35 H8
2U36 B6
2U37 B6
2U38 A3
2U39 F6
2U40 F3
2U41 F7
2U42 E6
3U01 C14
3U02 B1
3U03 C1
3U04 C2
3U05 C3
3U06 C12
3U07 C9
3U08 C11
3U09 C4
3U10 D14
3U11 D4
3U12 G10
3U13 D7
3U14 D1
3U15 D14
3U16 D11
3U17 D7
3U18 E11
3U19 E8
3U20 E14
3U21 E2
3U22 E12
3U23 E14
3U24 G6
3U25 F2
3U26 H4
3U27 H10
3U28 E1
3U29 C2
3U30 C2
3U31 B2
3U32 H1
3U33 H2
3U34 H4
3U35 H5
3U36 H10
3U37 F9
3U38 G9
3U39 G9
3U40 G9
3U41 H6
3U42 H5
3U43 G6
3U44 D2
3U45 E2
3U46 C10
3U51 A5
3U52 F10
3U53 F10
3U54 H7
3U55 E9
3U56 B6
3U57 A6
3U58 G12
3U59 G12
3U60 F4
3U61 F5
3U62 F7
3U63 F6
3U64 F7
3U65 F5
3U66 F4
3U67 G5
3U68 G6
3U69 F6
3U70 C14
5U01 B8
5U02 A2
5U03 B7
5U04 C7
5U05 C12
5U06 D12
5U07 B8
6U01 A2
6U02 A8
6U03 A4
6U04 B5
6U05 B1
6U06 C9
6U07 D14
6U08 E3
6U09 E3
6U10 H1
6U11 H2
6U12 F9
6U13 E10
6U14 H8
6U16 F7
6U17 D14
7U01 B2
7U02 C4
7U03 C7
7U04 C5
7U05 D9
7U06-A D12
7U06-B D12
7U07-1 G10
7U07-2 F8
7U08 D5
7U09 E1
7U10 G4
7U11 E3
7U12 H3
7U13-1 F5
7U13-2 F4
FU03 B9
FU04 B9
FU05 C8
FU06 G6
FU07 H1
FU08 C9
FU09 D13
IU01 B2
IU02 C1
IU03 D1
IU04 E3
IU05 D3
IU06 D4
IU07 D4
IU08 C4
IU09 B4
IU10 A4
IU11 A5
IU13 D8
IU14 D6
IU15 A8
IU16 C11
IU17 D9
IU18 D11
IU19 C14
IU20 D10
IU21 D14
IU22 E12
IU25 H4
IU26 E2
IU27 G3
IU28 H2
IU30 C3
IU31 C2
IU32 E2
IU34 H6
IU35 G7
IU36 G9
IU37 F8
IU38 G9
IU39 G9
IU40 G10
IU41 H9
IU42 C6
IU43 E10
IU44 F11
IU45 F9
IU46 F5
IU47 F6
cU01 H12


B12
DC/DC - CONVERTOR
B12
+11V
1U01
T 1500mA
420
5U02
10u
2U15
100u
6U01
BAS316
2U10
22u
2U38
220u 16V
res
GND
21V6
IU10
6U03
BAS316
3U51
22R
IU11
2U03
1u0
6U04
BAS316
2U14
470n
3U02
1K0
IU01
21V4
7U01
BC857B
6U05
BZX384-C12
2U18
120p
3U31
120R
3U29
10R
2U30
120p
3U30
120R
3U03
33K
IU02
2U32
3n3
IU31
2U05
1n0
IU03
3U04
120R
2U16
4n7
IU30
3U14
1K0
3U44
1M0
2U27
6n8
2U21
470n
GND_SUPPLY
IU09
7U02
BC857B
3U05
1K0
IU08
2U06
22u
2U07
82p
3U09
5K6
IU07
3U11
120R
IU05
IU06
2U04
470n
2U17
470n
7U04
SI4410DY
3U56
4K7
2U36
100n
2U37
2n2
3U57
10K
GND-ILINK
5U01
res
2U01 res
2n2
IU15
6U02 res
STPS2L30A
FU03
+3V3-ILINK
2U02
res
47u
FU04
GND-ILINK
5U03
5U07
10u
5U04
FU05
SI4410DY
7U03
IU42
FU08
IU16
2U08
22u
BZG05C3V9
6U06
3U07
22R
2U29
330u 6.3V
res
IU17
7U05
BC857BW
2U09
1n0
3U13
10K
IU14
3U17
4R7
IU13
3U19
4K7
2U12
10n
7U08
BC817-25
BC817-25
7U09
3U28
47K
IU32
3U45
1M0
2U28
6n8
6U08
BAT54 COL
6U09
BAT54 COL
3U21
47K
IU04
IU26
7U11
BC847BW
3U25
220K
3U60
1K0
3U61
10K
IU46
3U65
1K0
7U13-1
BC847BPN
BC847BPN
7U13-2
2n2
2U40
3U66
10K
2U42
47n
3U69
1K0
3U63
2K2
2U39
100n
3U64
1K0
3U62
1K0
IU47
2U41
6n8
BZX384-C5V1
6U16
3U67
100R
3U68
10K
GND_SUPPLY
3V3_FAULT
B3e,B14a,B19b,B13c
7U10
BC847BW
IU27
3U43
22K
FU06
3U24
22K
IU35
10K
3U42
IU34
IU25
3U26
22K
2U25
100n
2U26
100n
2U22
1u0
3U41
1K0
3U54
100R
3U32
18K
FU07
6U10
BZX384-C15
IU28
0V7
7U12
BC847BW
2U19
100n
BAS316
6U11
3U33
10K
2U20
1u0
3U34
330K
3U35
10K
2U35
1u0
6U14
BAV99 COL
IU41
2U24
1n0
IU36
3U39
22K
IU39
3U40
150K
3U36
2K2
7U07-2
IU37
3U38
2K2
BC847BPN
IU38
BC847BPN
7U07-1
IU40
3U37
22K
3U55
1K0
BZX384-C5V1
6U12
IU45
2U33
1u0
PDZ8.2-B
6U13
IU43
3U53
18K
3U52
1K0
IU44
3U12
22K
2U34
22n
3U27
22K
3U46
47K 1%
3U08
1K5 1%
IU18
3U16
120R
IU20
2U11
1n0
3U18
1K0 1%
3V4
5U05
10u
+3V3_SIM
2U23
100u
3U06
470R
7U06-1
BC847BS
1V6
7U06-2
BC847BS
1V7
IU22
3U22
270R
5U06
10u
+3V3_DCDCFBX
2U31
100u
FU09
3U01
1K0
3U70
1K0
6V9
IU19
3U10
1R0
6U07
PDZ6.8-B
6U17
PDZ6.8-B
3U15
3K3 1%
IU21
3U20
1K0 1%
2U13
220n
3U23
1R0
3U58
1R0 res
3U59
1R0 res
cU01
GND
A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
8
9
10
11
12
13
14
8204 000 8480.1
F_15460_027.eps
070405

SSB: Main Tuner

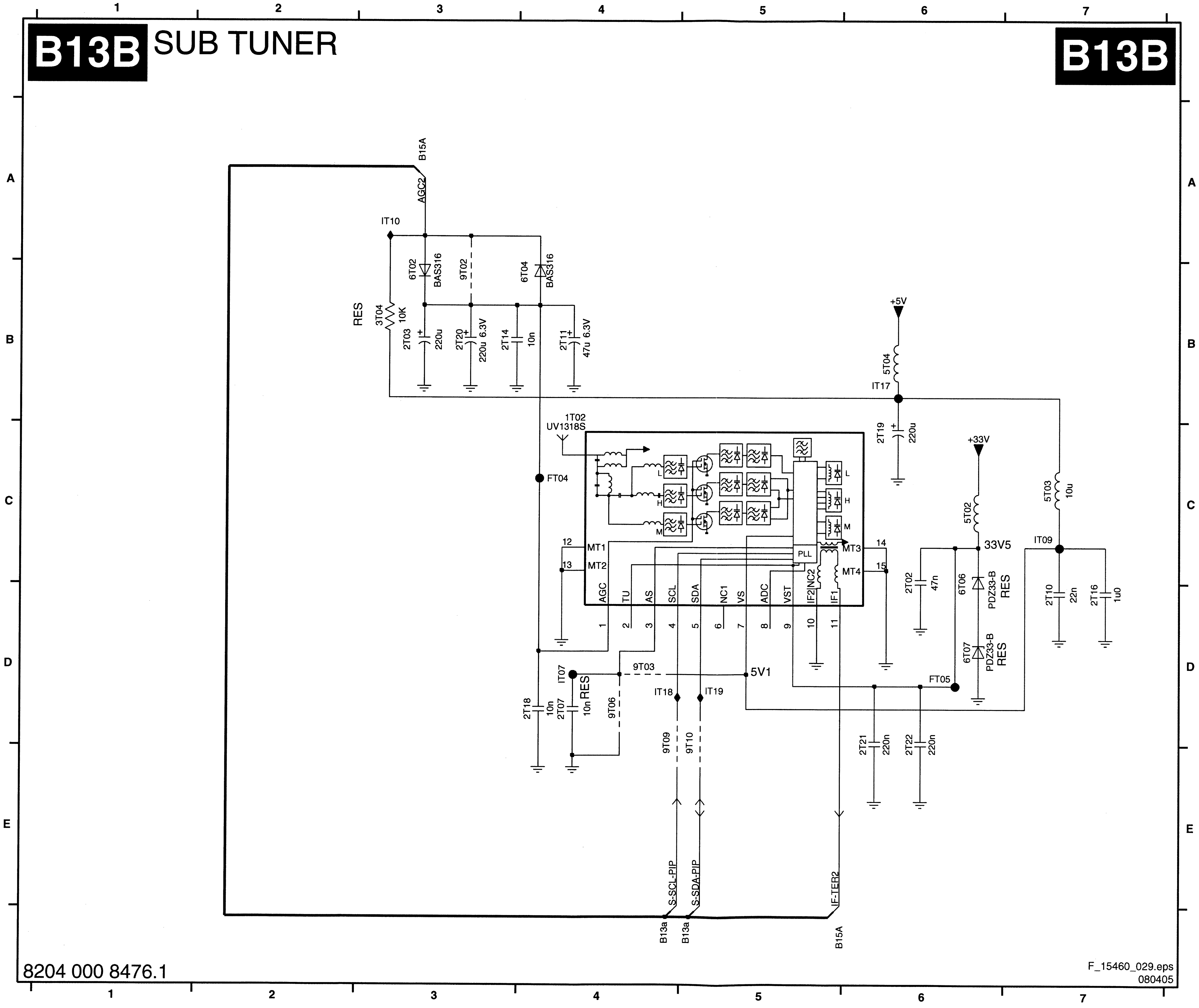
1T01 B3 2T05 C1 2T12 C7 2T17 D2 2T62 D5 3T05 C7 5T22 C5 6T03 B2 7T50 C6 9T05 E4 9T12 E7 AT00 E5 FT52 D4 IT50 A1 IT53 C7
2T01 B2 2T06 E4 2T13 B2 2T60 B2 2T63 D5 3T06 D7 5T25 C6 6T05 D6 9T01 B2 9T07 E4 9T14 C5 FT50 B1 FT53 C6 IT51 D4 IT54 D7
2T04 C5 2T09 D5 2T15 D5 2T61 B2 3T03 B1 5T20 B1 6T01 B2 6T08 D5 9T04 D4 9T08 E4 9T50 E7 FT51 C2 FT54 D5 IT52 D4


B13A
MAIN TUNER
B13A
1 2 3 4 5 6 7
A B C D E
B2
AGC
IT50
6T01
BAS316
9T01
6T03
BAS316
+5V
3T03
RES
2T01
220u
2T60
220u 6.3V
2T13
10n
2T61
47u 6.3V
5T20
FT50
2T05
220u
RES
1T01
UV1318ST/AIH-MK3
FT51
RF IN
RF OUT
PRE-FIL
BOOSTER SPLITTER
PRE-FIL
TRACK FILTER
GAIN CTRL PRE-AMP
TRACK FILTER
INTMED FILTER
MIX-OSC
IF AMP
AGC DET
PLL
IFOUT
MT
MT
12
13
14
11
15
16
17
AGC
TU
NC1
NC2
33V
5V
AS
SCL
SDA
ADC
1
2
6
10
9
7
3
4
5
8
0V5
2T17
10n
+33V
5T22
5T25
10u
FT53
2T04
47n
9T14
6T08
PDZ33-B
SML4752-33V
6T05
FT54
9T04
FT52
IT52
IT51
9T05
10n
2T06
9T07
9T08
2T62
220n
2T63
220n
2T09
22n
2T15
1u0
AT00
IF-TER
B2
7T50
P82B96TD
RES
VCC
8
1
SX
TX
3
RX
2
7
SY
TY
5
RY
6
GND
4
3T05
10K
RES
2T12
100n
IT53
3T06
10K
RES
IT54
9T50
9T12
SDA-S
SCL-S
S-SCL-PIP
S-SDA-PIP
B13b
B13b

8204 000 8479.1

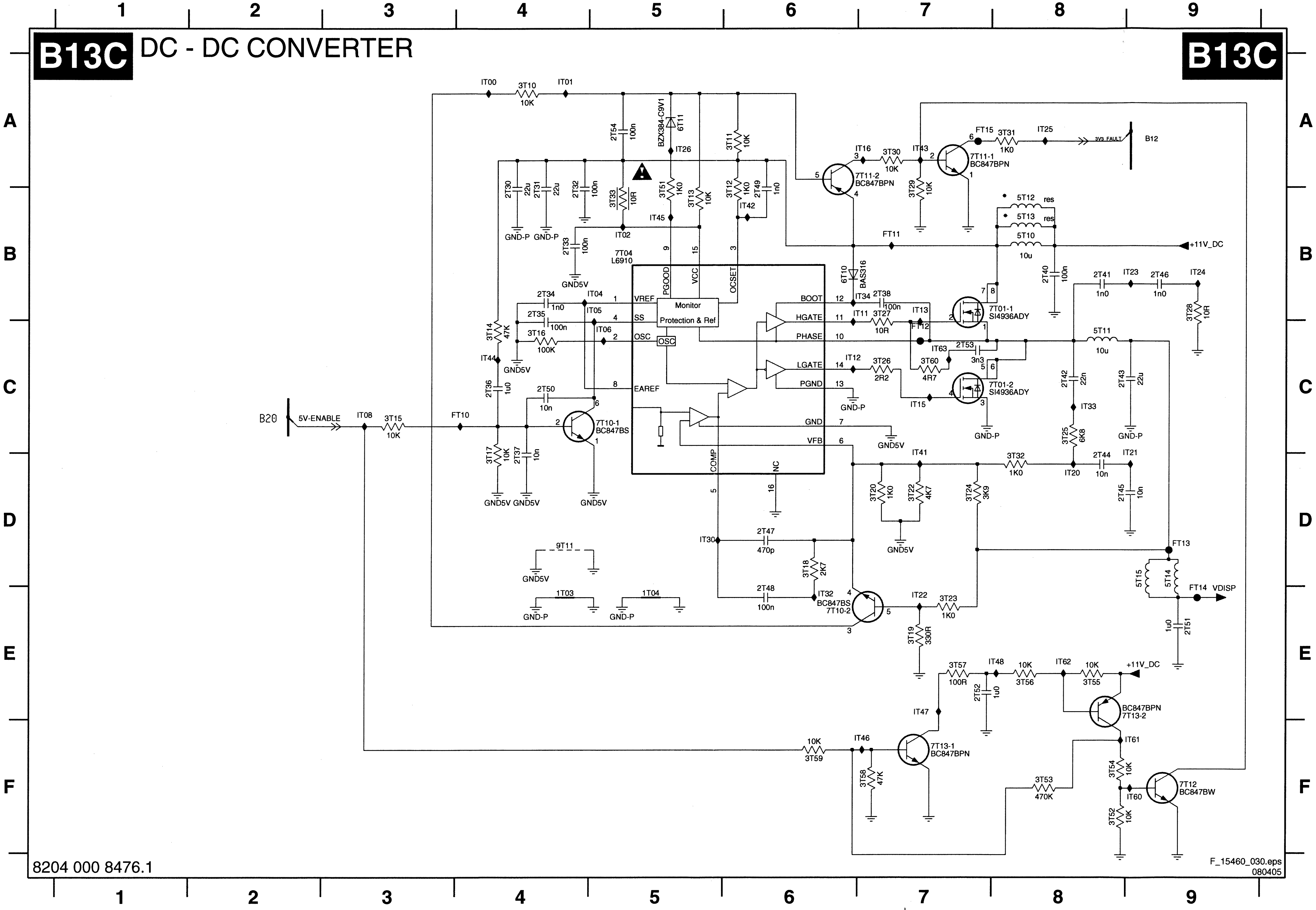
F_15460_028.eps
080405

SSB: Sub Tuner


B13B
SUB TUNER
B13B
1
2
3
4
5
6
7
A
B
C
D
E
B15A
AGC2
IT10
6T02
BAS316
9T02
6T04
BAS316
RES
3T04
10K
2T03
220u
2T20
220u 6.3V
2T14
10n
2T11
47u 6.3V
+5V
5T04
IT17
2T19
220u
1T02
UV1318S
FT04
L
H
M
PLL
12
13
MT1
MT2
MT3
MT4
14
15
AGC
TU
AS
SCL
SDA
NC1
VS
ADC
VST
IF2|NC2
IF1
1
2
3
4
5
6
7
8
9
10
11
+33V
5T02
33V5
2T02
47n
6T06
PDZ33-B
RES
6T07
PDZ33-B
RES
5T03
10u
IT09
2T10
22n
2T16
1u0
IT07
9T03
5V1
FT05
IT18
IT19
2T18
10n
2T07
10n
RES
9T06
9T09
9T10
2T21
220n
2T22
220n
S-SCL-PIP
S-SDA-PIP
IF-TER2
B13a
B13a
B15A
8204 000 8476.1
F_15460_029.eps
080405

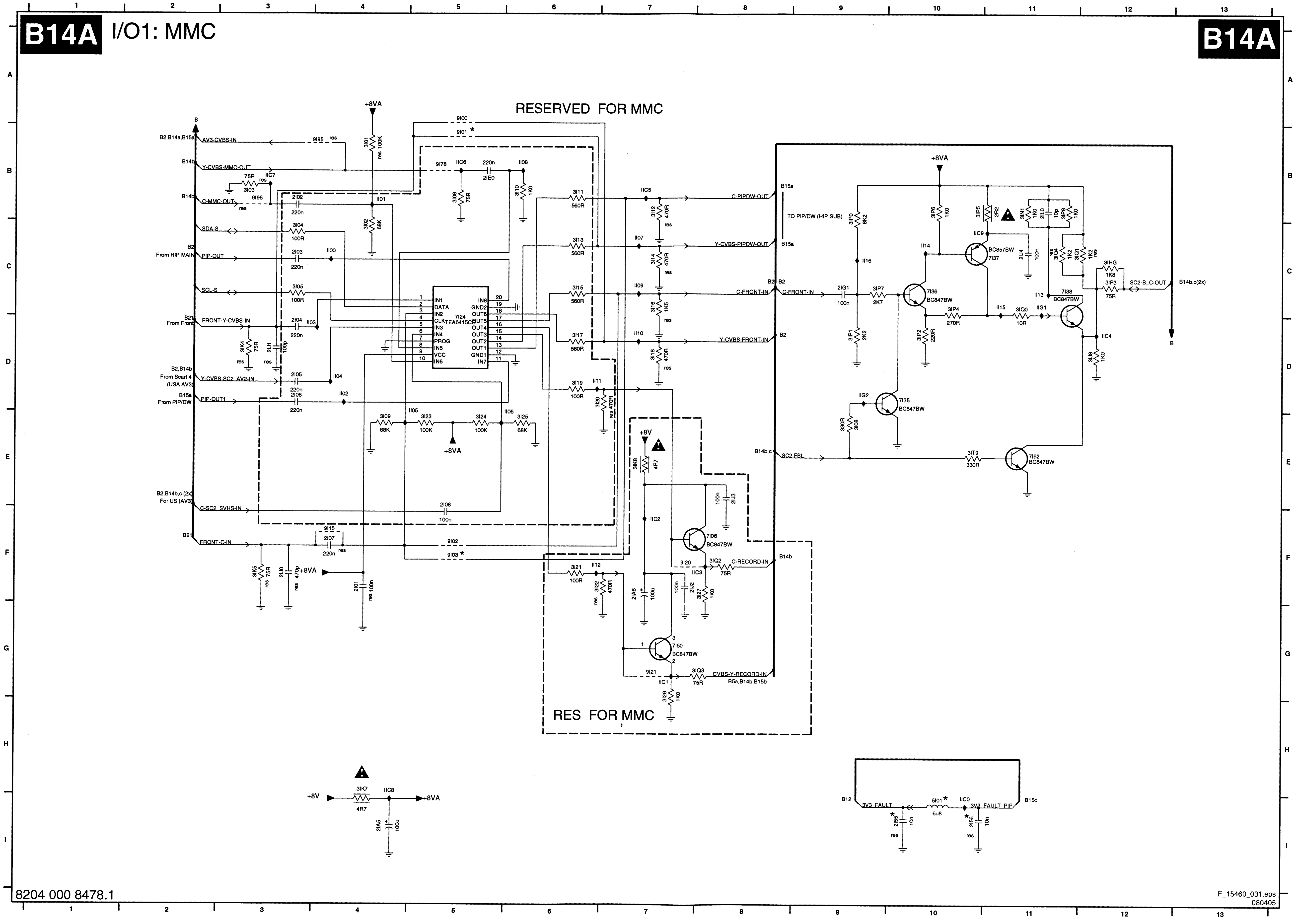
1T02	B4
2T02	C6
2T03	B3
2T07	D4
2T10	D7
2T11	B4
2T14	B3
2T16	D7
2T18	D4
2T19	C6
2T20	B3
2T21	D6
2T22	D6
3T04	B3
5T02	C6
5T03	C7
5T04	B6
6T02	B3
6T04	B4
6T06	C6
6T07	D6
9T02	B3
9T03	D4
9T06	D4
9T09	D4
9T10	D5
FT04	C4
FT05	D6
IT07	D4
IT09	C7
IT10	A3
IT17	B6
IT18	D4
IT19	D5

SSB: DC/DC Converter


B13C
DC - DC CONVERTER
B13C
1 2 3 4 5 6 7 8 9
A B C D E F
IT00
3T10 10K
IT01
2T54 100n
BZX384-C9V1 6T11
IT26
3T11 10K
2T30 22u
2T31 22u
2T32 100n
3T33 10R
3T51 1K0
3T13 10K
3T12 1K0
2T49 1n0
IT45
IT42
IT02
GND-P GND-P
2T33 100n
GND5V
7T04 L6910
PGOOD VCC OCSET
9 15 3
2T34 1n0
IT04
VREF 1
Monitor Protection & Ref
2T35 100n
IT05
SS 4
3T16 100K
IT06
OSC 2
OSC
3T14 47K
IT44
GND5V
EAREF 8
2T36 1u0
2T50 10n
7T10-1 BC847BS
B20
5V-ENABLE
IT08
3T15 10K
FT10
3T17 10K
2T37 10n
GND5V GND5V GND5V
COMP NC
5 16
BOOT 12
HGATE 11
PHASE 10
LGATE 14
PGND 13
GND 7
VFB 6
GND-P
GND5V
IT16
3T30 10K
IT43
7T11-2 BC847BPN
7T11-1 BC847BPN
FT15
3T31 1K0
IT25
3V3_FAULT
B12
3T29 10K
5T12 res
5T13 res
5T10 10u
FT11
+11V_DC
6T10 BAS316
2T40 100n
IT34
2T38 100n
IT11
3T27 10R
IT13
FT12
7T01-1 SI4936ADY
IT63
2T53 3n3
3T60 4R7
IT12
3T26 2R2
IT15
7T01-2 SI4936ADY
GND-P
2T41 1n0
IT23
2T46 1n0
IT24
3T28 10R
5T11 10u
2T42 22n
2T43 22u
IT33
3T25 6K8
GND-P
IT41
3T32 1K0
IT20
2T44 10n
IT21
2T45 10n
3T20 1K0
3T22 4K7
3T24 3K9
GND5V
FT13
IT30
2T47 470p
3T18 2K7
2T48 100n
IT32
7T10-2 BC847BS
IT22
3T23 1K0
3T19 330R
5T15 5T14
FT14 VDISP
2T51 1u0
9T11
GND5V
1T03
1T04
GND-P GND-P
3T57 100R
IT48
10K 3T56
IT62
10K 3T55
+11V_DC
2T52 1u0
BC847BPN 7T13-2
IT47
IT61
10K 3T59
IT46
7T13-1 BC847BPN
3T58 47K
3T54 10K
3T53 470K
IT60
3T52 10K
7T12 BC847BW
8204 000 8476.1
F_15460_030.eps 080405

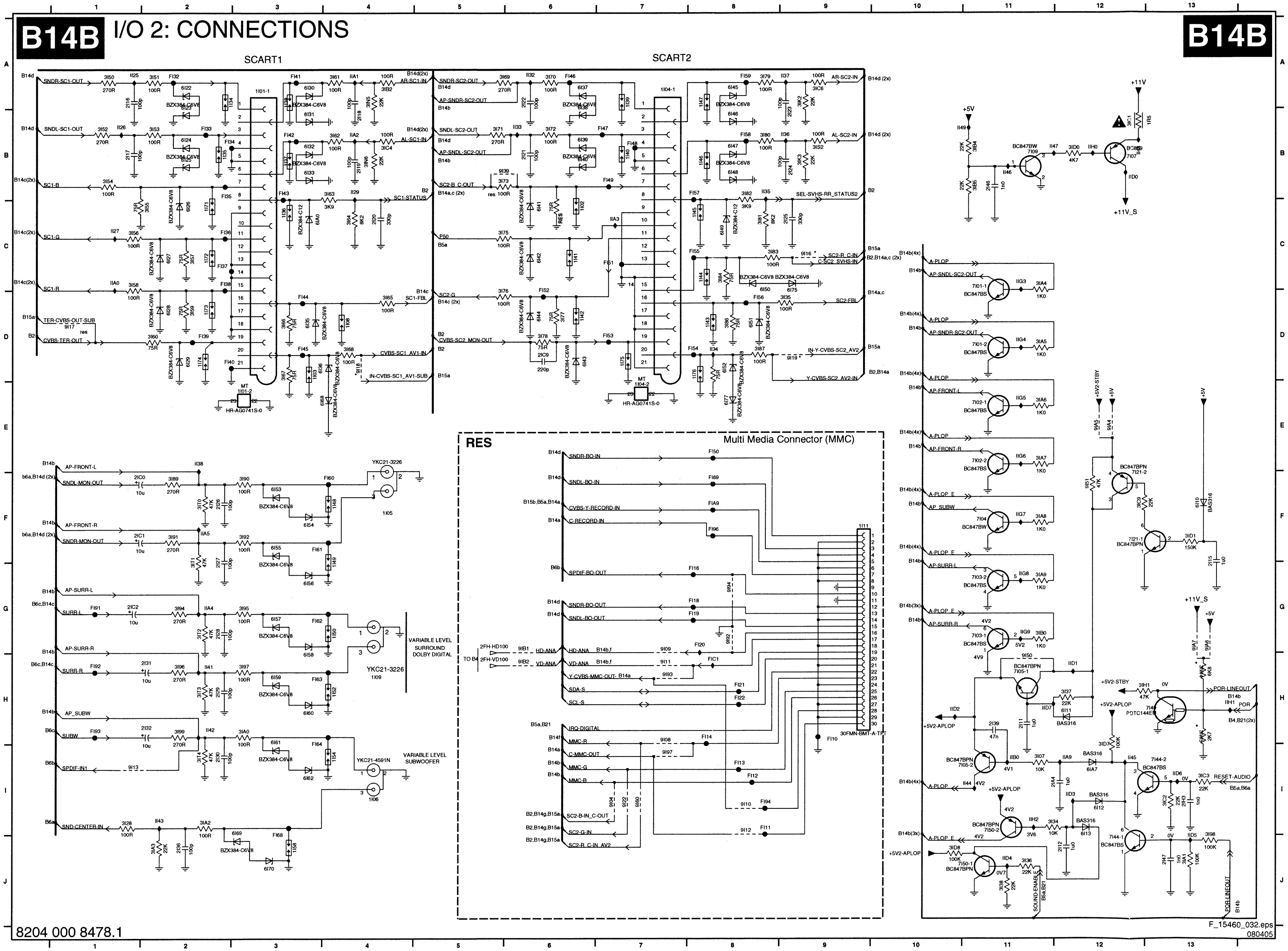
1T03	E4
1T04	E5
2T30	B4
2T31	B4
2T32	B4
2T33	B4
2T34	B4
2T35	B4
2T36	C4
2T37	D4
2T38	B7
2T40	B8
2T41	B8
2T42	C8
2T43	C8
2T44	D8
2T45	D8
2T46	B9
2T47	D6
2T48	E6
2T49	B6
2T50	C4
2T51	E9
2T52	E7
2T53	C7
2T54	A5
3T10	A4
3T11	A6
3T12	B6
3T13	B5
3T14	C4
3T15	C3
3T16	C4
3T17	D4
3T18	D6
3T19	E7
3T20	D7
3T22	D7
3T23	E7
3T24	D7
3T25	C8
3T26	C7
3T27	B7
3T28	B9
3T29	B7
3T30	A7
3T31	A8
3T32	D8
3T33	B5
3T51	B5
3T52	F8
3T53	F8
3T54	F8
3T55	E8
3T56	E8
3T57	E7
3T58	F7
3T59	F6
3T60	C7
5T10	B8
5T11	C8
5T12	B8
5T13	B8
5T14	D9
5T15	D9
6T10	B6
6T11	A5
7T01-1	B7
7T01-2	C7
7T04	B5
7T10-1	C5
7T10-2	E6
7T11-1	A7
7T11-2	A6
7T12	F9
7T13-1	F7
7T13-2	E8
9T11	D4
FT10	C4
FT11	B7
FT12	C7
FT13	D9
FT14	E9
FT15	A7
IT00	A4
IT01	A4
IT02	B5
IT04	B5
IT05	B5
IT06	C5
IT08	C3
IT11	B7
IT12	C6
IT13	B7
IT15	C7
IT16	A7
IT20	D8
IT21	C9
IT22	E7
IT23	B9
IT24	B9
IT25	A8
IT26	A5
IT30	D5
IT32	E6
IT33	C8
IT34	B7
IT41	C7
IT42	B6
IT43	A7
IT44	C4
IT45	B5
IT46	F7
IT47	E7
IT48	E7
IT60	F9
IT61	F9
IT62	E8
IT63	C7

SSB: I/O1: MMC


B14A
I/O1: MMC
B14A
RESERVED FOR MMC
RES FOR MMC
+8VA
+8V
B2,B14a,B15a
AV3-CVBS-IN
B14b
Y-CVBS-MMC-OUT
C-MMC-OUT
SDA-S
From HIP MAIN
PIP-OUT
SCL-S
From Front
FRONT-Y-CVBS-IN
From Scart 4 (USA AV3)
Y-CVBS-SC2_AV2-IN
From PIP/DW
PIP-OUT1
For US (AV3)
C-SC2_SVHS-IN
FRONT-C-IN
7124 TEA6415C
IN1
DATA
IN2
CLK
IN3
IN4
PROG
IN5
VCC
IN6
IN8
GND2
OUT6
OUT5
OUT4
OUT3
OUT2
OUT1
GND1
IN7
C-PIPDW-OUT
Y-CVBS-PIPDW-OUT
TO PIP/DW (HIP SUB)
C-FRONT-IN
Y-CVBS-FRONT-IN
SC2-FBL
SC2-B_C-OUT
B14b,c(2x)
C-RECORD-IN
CVBS-Y-RECORD-IN
B5a,B14b,B15b
7106 BC847BW
7160 BC847BW
7135 BC847BW
7136 BC847BW
7137 BC857BW
7138 BC847BW
7162 BC847BW
3V3_FAULT
3V3_FAULT_PIP
5I01 6u8
8204 000 8478.1
F_15460_031.eps
080405

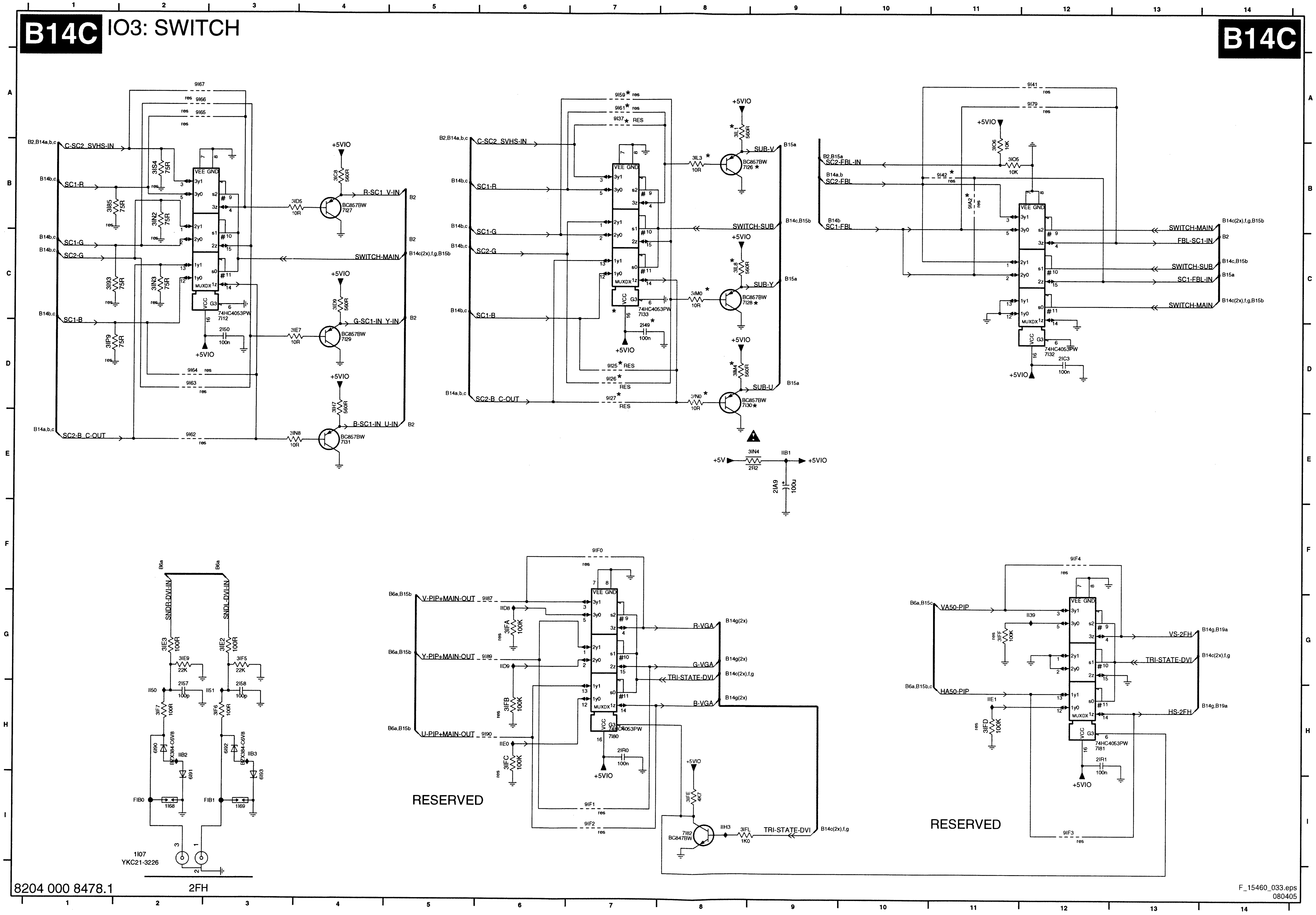
2I01	F4	9I96	B3
2I02	B3	II00	C4
2I03	C3	II01	B4
2I04	D3	II02	D4
2I05	D3	II03	D3
2I06	D3	II04	D4
2I07	F4	II05	D5
2I08	E5	II06	E6
2I55	I10	II07	C7
2I56	I10	II08	B6
2IA5	I4	II09	C7
2IA6	F7	II10	D7
2IE0	B5	II11	D6
2IG1	C9	II12	F6
2IJ0	F3	II13	C11
2IJ1	D3	II14	C10
2IJ2	F7	II15	C11
2IJ3	E8	II16	C9
2IJ4	C11	IIC0	I10
2IL0	B11	IIC1	G7
3I01	B4	IIC2	F7
3I02	C4	IIC3	F8
3I03	B3	IIC4	D12
3I04	C3	IIC5	B7
3I05	C3	IIC6	B5
3I06	B5	IIC7	B3
3I08	E9	IIC8	H4
3I09	E4	IIC9	C10
3I10	B6	IIG1	C11
3I11	B6	IIG2	D9
3I12	B7		
3I13	C6		
3I14	C7		
3I15	C6		
3I16	C7		
3I17	D6		
3I18	D7		
3I19	D6		
3I20	D6		
3I21	F6		
3I22	F6		
3I23	E5		
3I24	E5		
3I25	E6		
3I26	G7		
3I27	F8		
3IHG	C12		
3IJ8	D12		
3IK4	D3		
3IK5	F3		
3IK7	H4		
3IK8	E7		
3IN1	B11		
3IP0	B9		
3IP1	D9		
3IP2	D10		
3IP3	C12		
3IP4	C10		
3IP5	B10		
3IP6	B10		
3IP7	C9		
3IP8	B11		
3IQ0	C11		
3IQ1	C11		
3IQ2	F8		
3IQ3	G8		
3IQ4	C11		
3IT9	E10		
5I01	I10		
7I06	F8		
7I24	C1		
7I24	D5		
7I35	D10		
7I36	C10		
7I37	C11		
7I38	C11		
7I60	G7		
7I62	E11		
9I00	A5		
9I01	B5		
9I02	F5		
9I03	F5		
9I15	F4		
9I20	F7		
9I21	G7		
9I78	B5		
9I95	B4		

SSB: I/O2: Connections


B14B
I/O 2: CONNECTIONS
SCART1
SCART2
SNDR-SC1-OUT
SNDL-SC1-OUT
SC1-B
SC1-G
SC1-R
TER-CVBS-OUT-SUB
CVBS-TER-OUT
AR-SC1-IN
AL-SC1-IN
SC1-STATUS
SC1-FBL
CVBS-SC1_AV1-IN
IN-CVBS-SC1_AV1-SUB
SNDR-SC2-OUT
AP-SNDR-SC2-OUT
SNDL-SC2-OUT
AP-SNDL-SC2-OUT
SC2-B_C-OUT
P50
SC2-G
CVBS-SC2_MON-OUT
AR-SC2-IN
AL-SC2-IN
SEL-SVHS-RR_STATUS2
SC2-R_C-IN
C-SC2_SVHS-IN
SC2-FBL
IN-Y-CVBS-SC2_AV2
Y-CVBS-SC2_AV2-IN
BZX384-C6V8
BZX384-C12
HR-AG0741S-0
1I01-1
1I01-2
1I04-1
1I04-2
MT
AP-FRONT-L
SNDL-MON-OUT
AP-FRONT-R
SNDR-MON-OUT
YKC21-3226
AP-SURR-L
SURR-L
AP-SURR-R
SURR-R
VARIABLE LEVEL SURROUND DOLBY DIGITAL
AP_SUBW
SUBW
SPDIF-IN1
YKC21-4591N
VARIABLE LEVEL SUBWOOFER
SND-CENTER-IN
RES
Multi Media Connector (MMC)
SNDR-BO-IN
SNDL-BO-IN
CVBS-Y-RECORD-IN
C-RECORD-IN
SPDIF-BO-OUT
SNDR-BO-OUT
SNDL-BO-OUT
HD-ANA
VD-ANA
2FH-HD100
2FH-VD100
TO B4
Y-CVBS-MMC-OUT
SDA-S
SCL-S
IRQ-DIGITAL
MMC-R
C-MMC-OUT
MMC-G
MMC-B
SC2-B-IN_C-OUT
SC2-G-IN
SC2-R_C-IN_AV2
30FMN-BMT-A-TFT
+11V
+11V_S
+5V
BC847BW
BC857B
A-PLOP
AP-SNDL-SC2-OUT
AP-SNDR-SC2-OUT
AP-FRONT-L
AP-FRONT-R
AP_SUBW
AP-SURR-L
AP-SURR-R
BC847BS
BC847BPN
+5V2-STBY
+5V2-APLOP
POR-LINEOUT
POR
PDTC144E
RESET-AUDIO
SOUND-ENABLE
BAS316
8204 000 8478.1
F_15460_032.eps
080405

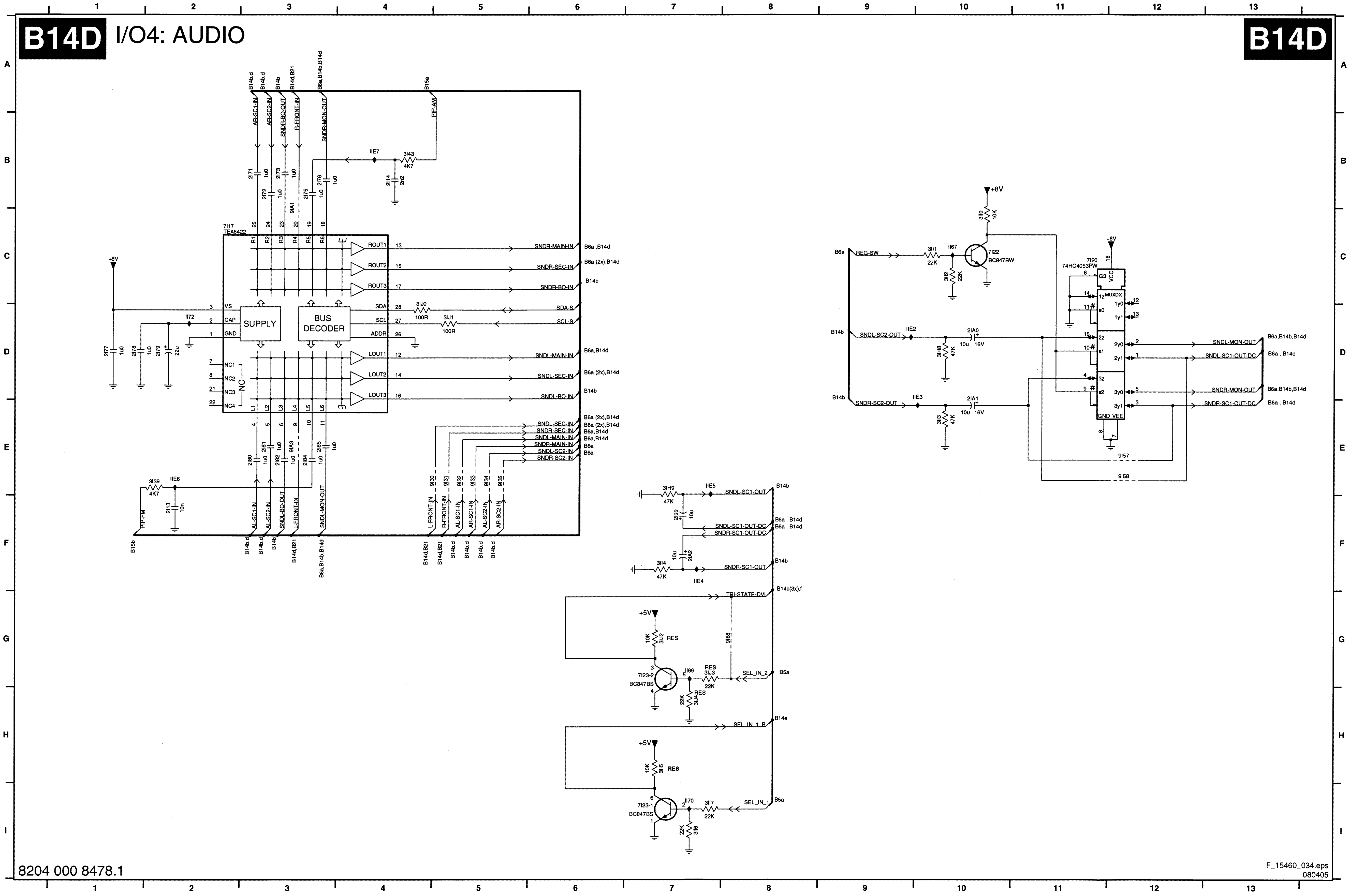
1I01-1	A3
1I01-2	E3
1I02	C6
1I03	D3
1I04-1	A7
1I04-2	E7
1I05	F4
1I06	I4
1I08	D4
1I09	H4
1I11	F9
1I34	A2
1I35	B2
1I36	C3
1I37	B3
1I38	A3
1I39	A7
1I40	B7
1I41	C6
1I42	D6
1I43	D8
1I44	C8
1I45	C8
1I46	B8
1I47	A8
1I48	F4
1I49	F4
1I50	G4
1I52	H4
1I54	I4
1I58	J3
1I71	C2
1I72	C2
1I73	D2
1I74	D2
1I75	D7
1I76	D8
2I11	H11
2I12	J12
2I15	F13
2I16	A1
2I17	B1
2I18	B4
2I19	B4
2I20	C4
2I21	B6
2I22	A6
2I23	B9
2I24	B9
2I25	C9
2I26	F2
2I27	F2
2I28	G2
2I29	H2
2I30	I2
2I31	H2
2I32	H2
2I36	J2
2I39	H11
2I46	B11
2I47	J13
2IA4	I12
2IC0	F1
2IC1	F1
2IC2	G1
2IC9	D6
2IH3	I13
3I07	I11
3I28	I1
3I34	I11
3I35	D9
3I36	J11
3I37	H12
3I38	J11
3I50	A1
3I51	A2
3I52	B1
3I53	B2
3I54	B1
3I55	C2
3I56	C1
3I57	C2
3I58	C1
3I59	D2
3I60	D2
3I61	A4
3I62	B4
3I63	B4
3I64	C4
3I65	D4
3I66	D3
3I67	D3
3I68	D4
3I69	A5
3I70	A6
3I71	B5
3I72	B6
3I73	B5
3I75	C5
3I76	D5
3I77	D6
3I78	D6
3I79	A8
3I80	B8
3I81	C8
3I82	B8
3I83	C8
3I84	C8
3I86	D8
3I87	D8
3I89	F2
3I90	F3
3I91	F2
3I92	F3
3I94	G2
3I95	G3
3I96	H2
3I97	H3
3I98	J13
3I99	H2
3IA0	H3
3IA1	J13
3IA2	I2
3IA3	J2
3IA4	C11
3IA5	D11
3IA6	E11
3IA7	E11
3IA8	F11
3IA9	G11
3IB0	G11
3IB2	A4
3IB4	B11
3IB5	B11
3IC1	B12
3IC2	I13
3IC3	I13
3IC4	B4
3IC6	A9
3IC9	F12
3ID0	B12
3ID1	F13
3ID7	H12
3ID8	J10
3IH1	H12
3IK2	A9
3IK3	B9
3IN5	A4
3IN6	B4
3IS2	B9
3IT0	F2
3IT1	F2
3IT2	G2
3IT3	H2
3IT4	I2
3IW4	H13
3IW5	H13
6I10	F13
6I11	H12
6I12	I12
6I13	I12
6I22	A2
6I23	A2
6I24	B2
6I25	B2
6I26	C2
6I27	C2
6I28	D2
6I29	D2
6I30	A3
6I31	B3
6I32	B3
6I33	B3
6I35	D3
6I36	D3
6I37	A6
6I38	A6
6I39	B6
6I40	B6
6I41	C6
6I42	C6
6I43	D6
6I44	D6
6I45	A8
6I46	B8
6I47	B8
6I48	B8
6I49	C8
6I50	C8
6I51	D8
6I52	D8
6I53	F3
6I54	F3
6I55	F3
6I56	G3
6I57	G3
6I58	H3
6I59	H3
6I60	H3
6I61	H3
6I62	I3
6I68	E4
6I69	I3
6I70	J3
6I75	C9
6I77	E8
6IA0	C3
6IA7	I12
7I01-1	C11
7I01-2	D11
7I02-1	E11
7I02-2	E11
7I03-1	G11
7I03-2	G11
7I04	F11
7I05-1	H11
7I05-2	I11
7I07	B12
7I09	B11
7I21-1	F12
7I21-2	E13
7I44-1	J12
7I44-2	I13
7I49	H13
7I50-1	J11
7I50-2	I11
9I04	I7
9I08	H7
9I09	G7
9I10	I8
9I11	H7
9I12	I8
9I13	I1
9I16	C9
9I17	D1
9I18	D4
9I19	D9
9I22	I7
9I39	B5
9I50	H11
9I51	F12
9I60	I7
9I92	G8
9I93	H7
9I94	G8
9I97	I7
9IA4	E12
9IA5	E12
9IA6	G13
9IA7	G13
9IB1	G6
9IB2	H6
FI10	H9
FI11	I8
FI12	I8
FI13	I8
FI14	H8
FI16	G8
FI18	G8
FI19	G8
FI20	G8
FI21	H8
FI22	H8
FI32	A2
FI33	B2
FI34	B2
FI35	B2
FI36	C2
FI37	C2
FI38	C2
FI39	D2
FI40	D2
FI41	A3
FI42	B3
FI43	B3
FI44	D3
FI45	D3
FI46	A6
FI47	B7
FI48	B7
FI49	B7
FI50	E8
FI51	C7
FI52	D6
FI53	D7
FI54	D8
FI55	C8
FI56	D8
FI57	B8
FI58	B8
FI59	A8
FI60	F4
FI61	F3
FI62	G3
FI63	H3
FI64	I3
FI68	J3
FI69	F8
FI91	G1
FI92	H1
FI93	H1
FI94	I8
FI96	F8
FIA9	F8
FIC1	H8
II25	A1
II26	B1
II27	C1
II29	B4
II32	A6
II33	B6
II34	D8
II35	B8
II36	B9
II37	A9
II38	E2
II41	H2
II42	H2
II43	I2
II44	I11
II45	I12
II46	B11
II47	B11
II48	B12
II49	B10
IIA0	C1
IIA1	A4
IIA2	B4
IIA3	C7
IIA4	G2
IIA5	F2
IIA9	I12
IIB0	I11
IID0	B12
IID1	H12
IID2	H10
IID3	I12
IID4	J11
IID5	J13
IID6	I13
IID7	H11
IIG3	C11
IIG4	D11
IIG5	E11
IIG6	E11
IIG7	F11
IIG8	G11
IIG9	G11
IIH0	B12
IIH1	H13
IIH2	I11

SSB: I/O3: Switch


B14C
IO3: SWITCH
B14C
C-SC2_SVHS-IN
SC1-R
SC1-G
SC2-G
SC1-B
SC2-B_C-OUT
R-SC1_V-IN
G-SC1-IN_Y-IN
B-SC1-IN_U-IN
SWITCH-MAIN
SUB-V
SWITCH-SUB
SUB-Y
SUB-U
SC2-FBL-IN
SC2-FBL
SC1-FBL
FBL-SC1-IN
SC1-FBL-IN
74HC4053PW
BC857BW
+5VIO
+5V
SNDR-DVI-IN
SNDL-DVI-IN
BZX384-C6V8
YKC21-3226
V-PIP+MAIN-OUT
Y-PIP+MAIN-OUT
U-PIP+MAIN-OUT
R-VGA
G-VGA
B-VGA
TRI-STATE-DVI
BC847BW
RESERVED
VA50-PIP
HA50-PIP
VS-2FH
HS-2FH
RESERVED
8204 000 8478.1
2FH
F_15460_033.eps
080405

1I07	I2
1I68	I2
1I69	I3
2I49	D7
2I50	D3
2I57	H2
2I58	H3
2IA9	E9
2IC3	D12
2IR0	H7
2IR1	H12
3I85	B1
3I93	C1
3IC8	B4
3ID5	B3
3ID9	C4
3IE2	G3
3IE3	G2
3IE7	D3
3IE9	G2
3IF5	G3
3IF6	H3
3IF7	H2
3IFA	G6
3IFB	H6
3IFC	H6
3IFD	H11
3IFE	I8
3IFF	G11
3IFL	I8
3IH7	D4
3IL1	A8
3IL3	B8
3IL8	C8
3IM0	C8
3IM4	D8
3IN0	D8
3IN2	B2
3IN3	C2
3IN4	E9
3IN8	E3
3IO5	B11
3IO6	B11
3IP9	D1
3IS4	B2
6I90	H2
6I91	I2
6I92	H3
6I93	I3
7I12	D3
7I26	B8
7I27	B4
7I28	C8
7I29	D4
7I30	D8
7I31	E4
7I32	D12
7I33	C7
7I80	H7
7I81	H12
7I82	I8
9I25	D7
9I26	D7
9I27	D7
9I37	A7
9I41	A12
9I42	B11
9I59	A7
9I61	A7
9I62	E2
9I63	D2
9I64	D2
9I65	A2
9I66	A2
9I67	A2
9I79	A12
9I87	G6
9I89	G6
9I90	H6
9IA2	B11
9IF0	F7
9IF1	I7
9IF2	I7
9IF3	I12
9IF4	F12
FIB0	I2
FIB1	I3
II39	G12
II50	H2
II51	H3
IIB1	E9
IIB2	H2
IIB3	H3
IID8	G6
IID9	G6
IIE0	H6
IIE1	H11
IIH3	I8

SSB: I/O4: Audio


B14D
I/O4: AUDIO
B14D
7I17
TEA6422
SUPPLY
BUS DECODER
VS
CAP
GND
NC1
NC2
NC3
NC4
NC
ROUT1
ROUT2
ROUT3
SDA
SCL
ADDR
LOUT1
LOUT2
LOUT3
R1
R2
R3
R4
R5
R6
L1
L2
L3
L4
L5
L6
AR-SC1-IN
AR-SC2-IN
SNDR-BO-OUT
R-FRONT-IN
SNDR-MON-OUT
PIP-AM
PIP-FM
AL-SC1-IN
AL-SC2-IN
SNDL-BO-OUT
L-FRONT-IN
SNDL-MON-OUT
SNDR-MAIN-IN
SNDR-SEC-IN
SNDR-BO-IN
SDA-S
SCL-S
SNDL-MAIN-IN
SNDL-SEC-IN
SNDL-BO-IN
SNDL-SC2-IN
SNDR-SC2-IN
L-FRONT-IN
R-FRONT-IN
AL-SC1-IN
AR-SC1-IN
AL-SC2-IN
AR-SC2-IN
B6a ,B14d
B6a (2x),B14d
B14b
B6a,B14d
B6a,B14d
B6a
B14b,d
B14d,B21
B6a,B14b,B14d
B15a
B15b
+8V
3I39 4K7
3I43 4K7
3IJ0 100R
3IJ1 100R
2I77 1u0
2I78 1u0
2I79 22u
2I13 10n
2I14 2n2
2I71 1u0
2I72 1u0
2I73 1u0
2I75 1u0
2I76 1u0
2I80 1u0
2I81 1u0
2I82 1u0
2I84 1u0
2I85 1u0
9IA1
9IA3
9I30
9I31
9I32
9I33
9I34
9I35
II72
IIE6
IIE7
+8V
3II0 10K
3II1 22K
3II2 22K
II67
7I22
BC847BW
REG-SW
B6a
B14b
SNDL-SC2-OUT
SNDR-SC2-OUT
IIE2
IIE3
2IA0 10u 16V
2IA1 10u 16V
3IH8 47K
3II3 47K
7I20
74HC4053PW
G3
VCC
MUXDX
1z
1y0
1y1
s0
2z
s1
2y0
2y1
3z
s2
3y0
3y1
GND VEE
SNDL-MON-OUT
SNDL-SC1-OUT-DC
SNDR-MON-OUT
SNDR-SC1-OUT-DC
B6a,B14b,B14d
B6a , B14d
9I57
9I58
3IH9 47K
IIE5
SNDL-SC1-OUT
2I99 10u
SNDL-SC1-OUT-DC
SNDR-SC1-OUT-DC
2IA2 10u
3II4 47K
IIE4
SNDR-SC1-OUT
B14b
B6a , B14d
TRI-STATE-DVI
B14c(3x),f
+5V
3IJ2 10K RES
9I68
7I23-2
BC847BS
II69
3IJ3 22K RES
3IJ4 22K RES
SEL_IN_2
B5a
SEL_IN_1_B
B14e
+5V
3II5 10K RES
7I23-1
BC847BS
II70
3II7 22K
3II6 22K
SEL_IN_1
B5a
8204 000 8478.1
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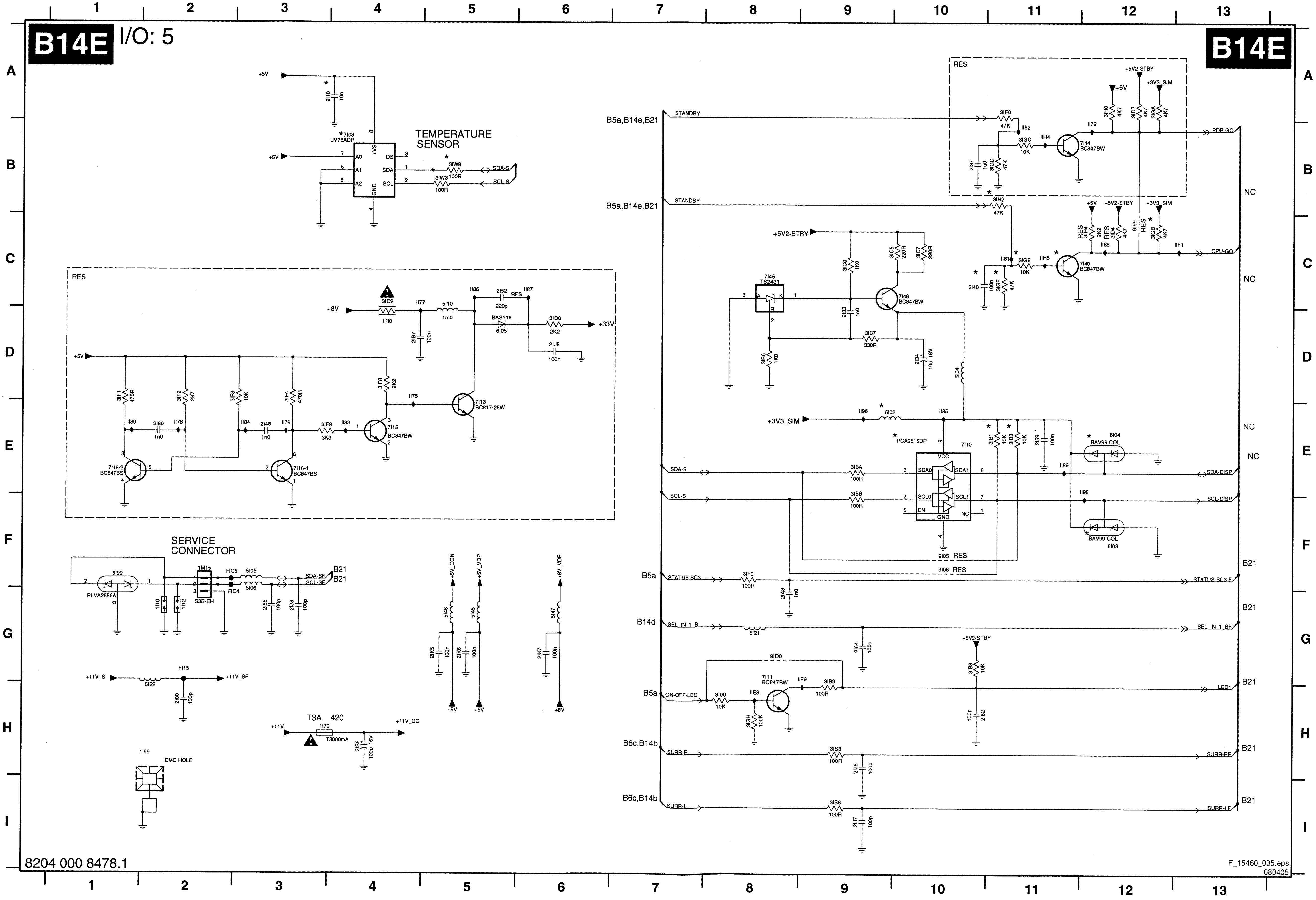
080405

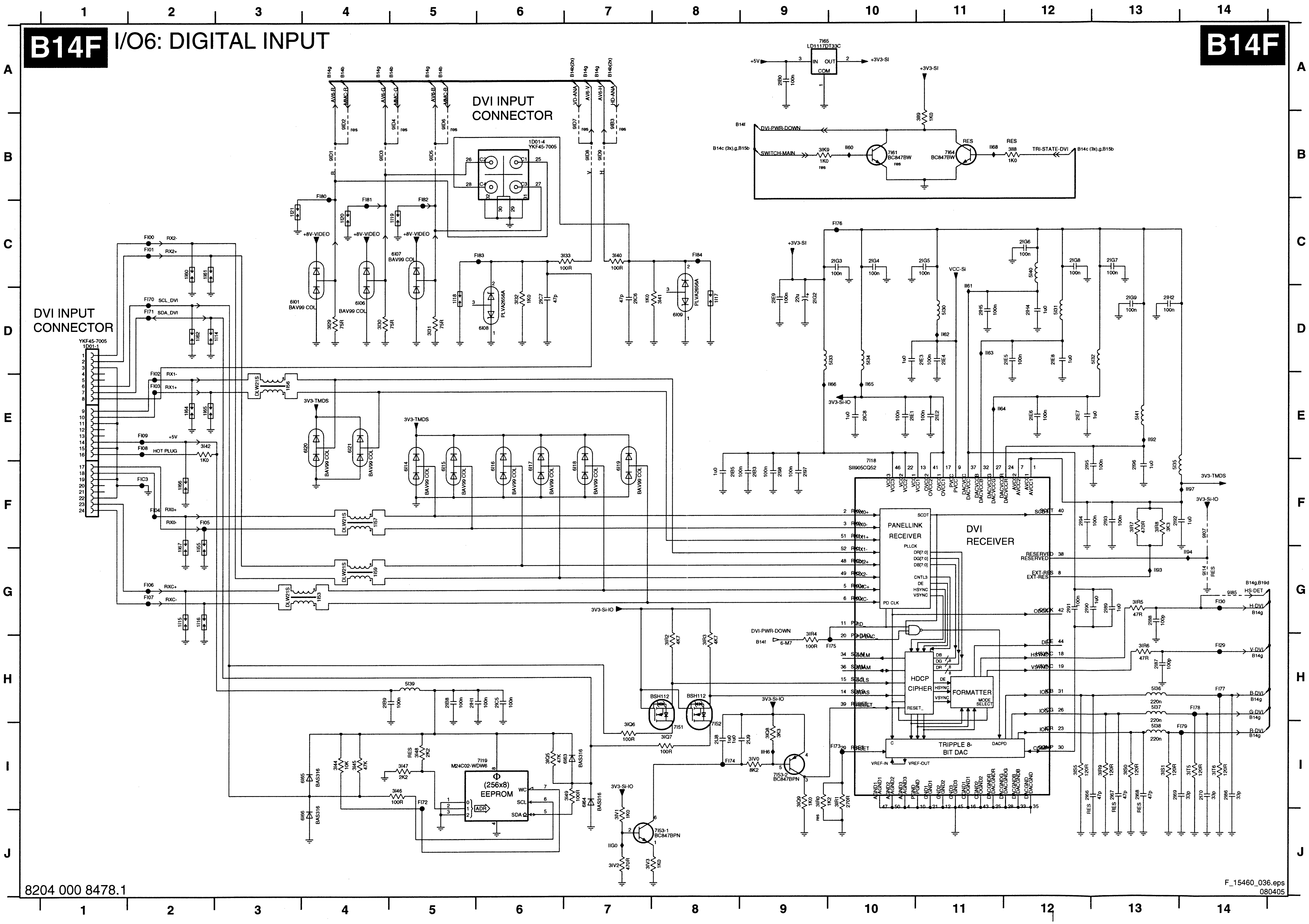
2I13	F2
2I14	B4
2I71	B3
2I72	B3
2I73	B3
2I75	B3
2I76	B3
2I77	D1
2I78	D1
2I79	D2
2I80	E3
2I81	E3
2I82	E3
2I84	E3
2I85	E3
2I99	F7
2IA0	D10
2IA1	E10
2IA2	F7
3I39	E2
3I43	B4
3IH8	D10
3IH9	E7
3II0	C10
3II1	C10
3II2	C10
3II3	E10
3II4	F7
3II5	H7
3II6	I7
3II7	I7
3IJ0	D4
3IJ1	D5
3IJ2	G7
3IJ3	G7
3IJ4	H7
7I17	C2
7I20	C12
7I22	C10
7I23-1	I7
7I23-2	G7
9I30	E5
9I31	E5
9I32	E5
9I33	E5
9I34	E5
9I35	E5
9I57	E12
9I58	E12
9I68	G8
9IA1	B3
9IA3	E3
II67	C10
II69	G7
II70	I7
II72	D2
IIE2	D9
IIE3	D10
IIE4	F7
IIE5	E7
IIE6	E2
IIE7	B4

SSB: I/O: 5

1I10 G2
1I12 G2
1I79 H3
1I99 H2
1M15 F2
2I00 H2
2I10 A3
2I33 D9
2I34 D10
2I37 B10
2I38 G3
2I40 C10
2I48 E3
2I52 C5
2I59 E11
2I60 E2
2I62 H10
2I64 G9
2I65 G3
2IA3 G8
2IB7 D4
2IJ5 D6
2IJ6 H9
2IJ7 I9
2IK5 G5
2IK6 G5
2IK7 G6
2IS6 H4
3I00 H8
3IB1 E11
3IB3 E11
3IB6 D8
3IB7 D9
3IB8 G10
3IB9 G9
3IBA E9
3IBB E9
3IC0 C9
3IC5 C9
3IC7 C10
3ID2 C4
3ID3 A12
3ID4 C12
3ID6 D6
3IE0 A11
3IF0 F8
3IF1 D1
3IF2 D2
3IF3 D2
3IF4 D3
3IF8 D4
3IF9 E3
3IGA A12
3IGB C12
3IGC B11
3IGD B11
3IGE C11
3IGF C11
3IGH H8
3IH0 A12
3IH2 B11
3IH4 C12
3IS3 H9
3IS6 I9
3IW3 B5
3IW9 B5
5I02 E9
5I04 D10
5I05 F3
5I06 G3
5I10 C5
5I21 G8
5I22 H2
5I45 G5
5I46 G5
5I47 G6
6I03 F12
6I04 E12
6I05 D5
6I99 F1
7I08 B4
7I10 E10
7I11 G8
7I13 E5
7I14 B11
7I15 E4
7I16-1 E3
7I16-2 E1
7I40 C11
7I45 C8
7I46 C10
9I05 F10
9I06 F10
9I99 C12
9ID0 G8
FI15 G2
FIC4 G2
FIC5 F2
II75 D4
II76 E3
II77 C4
II78 E2
II79 B12
II80 E1
II81 C11
II82 B11
II83 E4
II84 E3
II85 E10
II86 C5
II87 C6
II88 C12
II89 E11
II95 E12
II96 E9
IIE8 H8
IIE9 G9
IIF1 C13
IIH4 B11
IIH5 C11

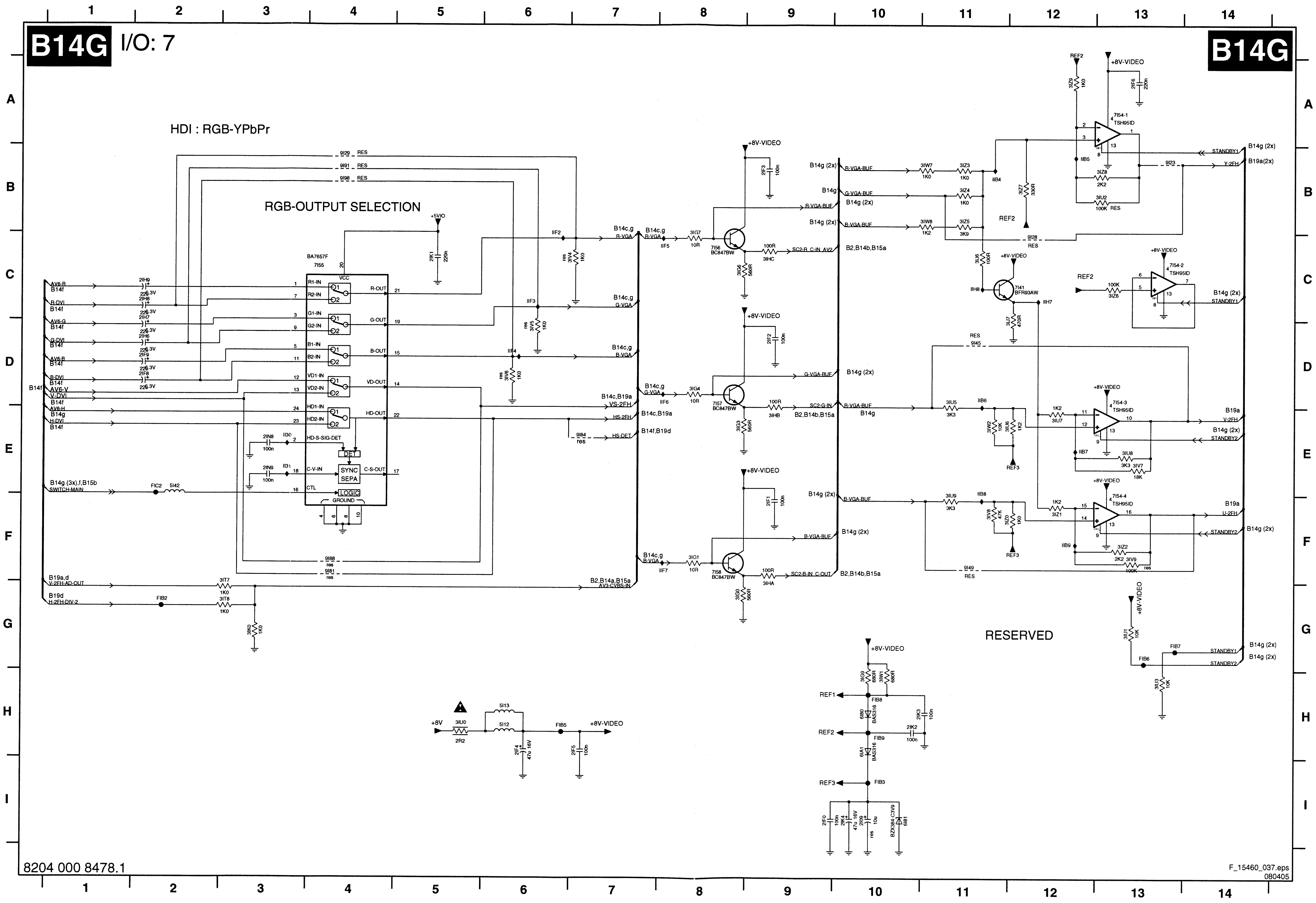

1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H I
B14E
I/O: 5
B14E
TEMPERATURE SENSOR
+5V
2I10 10n
7I08 LM75ADP
+VS
A0
A1
A2
GND
OS
SDA
SCL
3IW9 100R
3IW3 100R
SDA-S
SCL-S
RES
+8V
3ID2 1R0
II77
5I10 1m0
2IB7 100n
II86
2I52 220p
RES
II87
BAS316 6I05
3ID6 2K2
+33V
2IJ5 100n
+5V
3IF1 470R
3IF2 2K7
3IF3 10K
3IF4 470R
3IF8 2K2
II75
7I13 BC817-25W
II80
2I60 1n0
II78
II84
2I48 1n0
II76
3IF9 3K3
II83
7I15 BC847BW
7I16-2 BC847BS
7I16-1 BC847BS
SERVICE CONNECTOR
6I99
PLVA2656A
1I10
1I12
1M15
S3B-EH
FIC5
FIC4
5I05
5I06
2I65 100p
2I38 100p
SDA-SF
SCL-SF
B21
B21
+11V_S
5I22
FI15
+11V_SF
2I00 100p
+5V_CON
+5V_VDP
+8V_VDP
5I46
5I45
5I47
2IK5 100n
2IK6 100n
2IK7 100n
+5V
+5V
+8V
T3A 420
+11V
1I79 T3000mA
+11V_DC
2IS6 100u 16V
1I99
EMC HOLE
8204 000 8478.1
B5a,B14e,B21
STANDBY
RES
+5V2-STBY
+5V
+3V3_SIM
3IE0 47K
II82
3IGC 10K
IIH4
7I14 BC847BW
II79
3IH0 4K7
3ID3 4K7
3IGA 4K7
PDP-GO
2I37 1u0
3IGD 47K
B5a,B14e,B21
STANDBY
3IH2 47K
+5V
+5V2-STBY
+3V3_SIM
RES 3IH4 2K2
RES 3ID4 4K7
9I99 RES
3IGB 4K7
II88
IIF1
CPU-GO
II81
3IGE 10K
IIH5
7I40 BC847BW
2I40 100n
3IGF 47K
NC
NC
+5V2-STBY
3IC0 1K0
3IC5 220R
3IC7 220R
7I45 TS2431
A K R
7I46 BC847BW
2I33 1n0
3IB7 330R
3IB6 1K0
2I34 10u 16V
5I04
+3V3_SIM
II96
5I02
II85
PCA9515DP
7I10
VCC
SDA0
SDA1
SCL0
SCL1
EN
GND
NC
3IB1 10K
3IB3 10K
2I59 100n
6I04 BAV99 COL
NC
NC
SDA-S
3IBA 100R
II89
SDA-DISP
SCL-S
3IBB 100R
II95
SCL-DISP
BAV99 COL 6I03
9I05 RES
9I06 RES
B5a
STATUS-SC3
3IF0 100R
2IA3 1n0
STATUS-SC3-F
B21
B14d
SEL_IN_1_B
5I21
2I64 100p
SEL_IN_1_BF
B21
9ID0
+5V2-STBY
3IB8 10K
B5a
ON-OFF-LED
3I00 10K
IIE8
7I11 BC847BW
IIE9
3IB9 100R
3IGH 100K
2I62 100p
LED1
B21
B6c,B14b
SURR-R
3IS3 100R
2IJ6 100p
SURR-RF
B21
B6c,B14b
SURR-L
3IS6 100R
2IJ7 100p
SURR-LF
B21
F_15460_035.eps
080405

SSB: I/O6: Digital Input


B14F
I/O6: DIGITAL INPUT
B14F
DVI INPUT CONNECTOR
DVI INPUT CONNECTOR
YKF45-7005
1D01-1
1D01-4
YKF45-7005
+5V
7165
LD1117DT33C
+3V3-SI
DVI-PWR-DOWN
SWITCH-MAIN
TRI-STATE-DVI
7161 BC847BW
7164 BC847BW
RX2-
RX2+
SCL_DVI
SDA_DVI
RX1-
RX1+
+5V
HOT PLUG
RX0+
RX0-
RXC+
RXC-
DLW21S
3V3-TMDS
BAV99 COL
PLVA2656A
+8V-VIDEO
7118
SII905CQ52
PANELLINK RECEIVER
DVI RECEIVER
HDCP CIPHER
FORMATTER
TRIPPLE 8-BIT DAC
3V3-SI-IO
BSH112
7151
7152
7153-1 BC847BPN
7153-2 BC847BPN
7119
M24C02-WDW6
(256x8)
EEPROM
BAS316
HS-DET
H-DVI
V-DVI
B-DVI
G-DVI
R-DVI
1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
8204 000 8478.1
F_15460_036.eps
080405

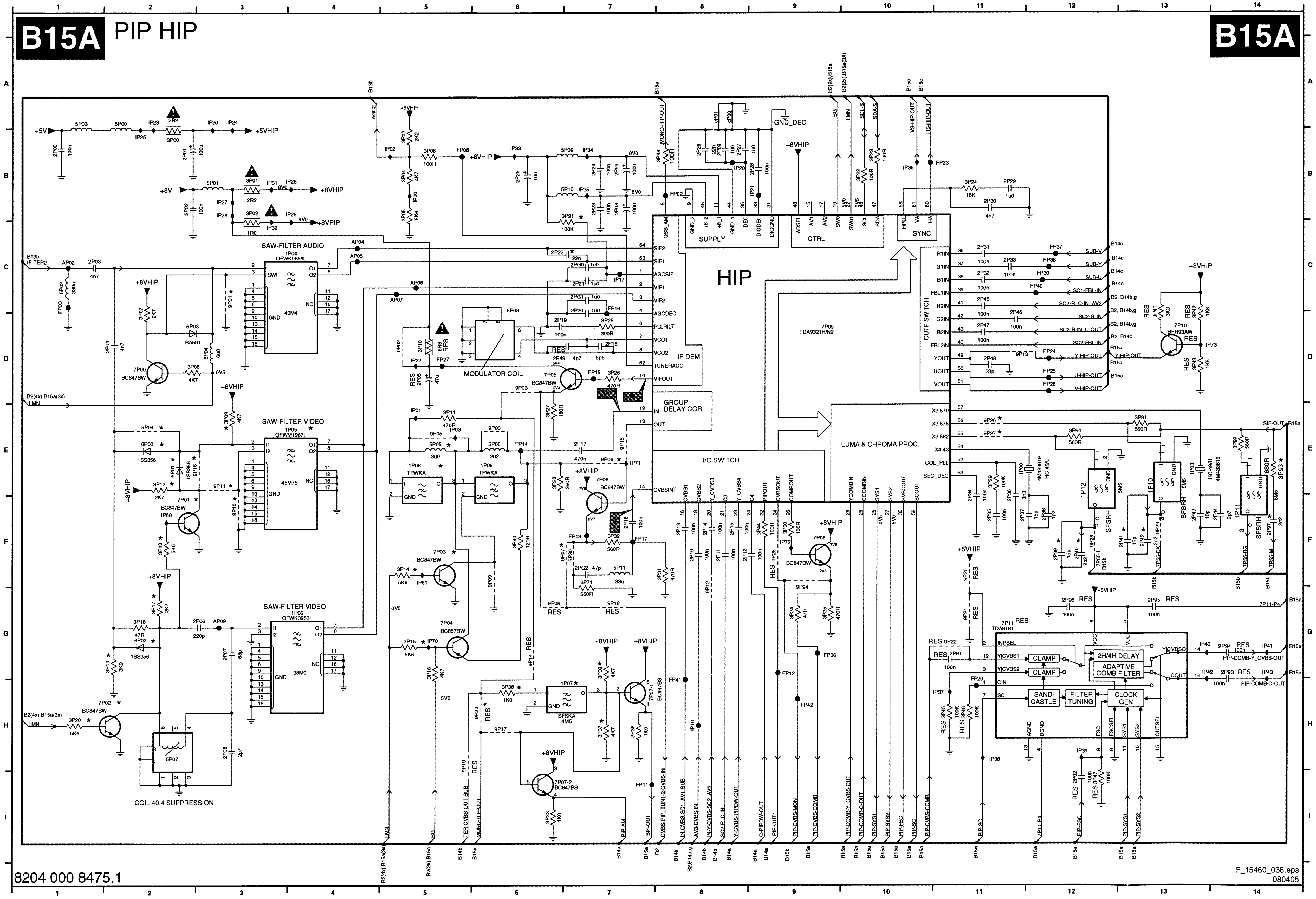
1D01-1	D1
1D01-4	B6
1I14	D2
1I15	G2
1I16	G2
1I17	D8
1I18	D5
1I19	C5
1I20	C4
1I21	C3
1I53	G4
1I55	F2
1I56	E3
1I57	F4
1I59	G4
1I60	C2
1I61	C2
1I62	D2
1I64	E2
1I65	E2
1I66	F2
1I67	F2
2I66	I12
2I67	I13
2I68	I13
2I69	I13
2I70	I14
2I86	I14
2I87	H13
2I88	G13
2I89	G13
2I90	G12
2I91	G12
2I92	F13
2I93	F13
2I94	F12
2I95	F12
2I96	F13
2I97	F9
2I98	F9
2IB0	A9
2IB3	F9
2IB5	F8
2IB8	H5
2IB9	H4
2IC5	H6
2IC6	D7
2IC7	D6
2IC8	E10
2IE1	E10
2IE2	E11
2IE3	D11
2IE4	D11
2IE5	D12
2IE6	E12
2IE7	E12
2IE8	D12
2IE9	D9
2IG2	D9
2IG3	C10
2IG4	C10
2IG5	C11
2IG6	C12
2IG7	C13
2IG8	C12
2IG9	D13
2IH1	H5
2IH2	D13
2IH4	D12
2IH5	D11
2IJ8	I8
2IJ9	I9
3I29	D4
3I30	D4
3I31	D5
3I32	D6
3I33	C7
3I40	C7
3I41	D8
3I42	E2
3I44	I4
3I45	I4
3I46	I5
3I47	I5
3I48	I5
3I49	I7
3II8	B12
3II9	B11
3IK9	B9
3IQ5	I6
3IQ6	I7
3IQ7	I8
3IQ8	I9
3IQ9	I9
3IR0	I9
3IR1	I10
3IR2	H8
3IR3	H8
3IR4	H9
3IR5	G13
3IR6	H13
3IR7	F13
3IR8	F13
3IR9	I13
3IS0	I13
3IS1	I13
3IS5	I12
3IT5	I14
3IT6	I14
3IV0	I9
3IV1	J7
3IV2	J7
3IV3	J7
5I30	D11
5I31	D12
5I32	D13
5I33	D10
5I34	D10
5I35	F13
5I36	H13
5I37	H13
5I38	I13
5I39	H5
5I40	C12
5I41	E13
6I01	D3
6I06	D4
6I07	C5
6I08	C6
6I09	C8
6I14	F5
6I15	F5
6I16	F6
6I17	F6
6I18	F7
6I19	F7
6I20	E4
6I21	E4
6I63	I7
6I64	I7
6I65	I4
6I66	J4
7I18	F10
7I19	I6
7I51	I8
7I52	I8
7I53-1	J8
7I53-2	I9
7I61	B10
7I64	B11
7I65	A9
9I07	F14
9I14	G14
9I85	G14
9IB3	B7
9ID1	B4
9ID2	B4
9ID3	B4
9ID4	B5
9ID5	B5
9ID6	B5
9ID7	B7
9ID8	B7
9ID9	B7
FI00	C2
FI01	C2
FI02	E2
FI03	E2
FI04	F2
FI05	F2
FI06	G2
FI07	G2
FI08	E2
FI09	E2
FI29	H14
FI30	G14
FI70	D2
FI71	D2
FI72	I5
FI73	I10
FI74	I8
FI75	H10
FI76	C10
FI77	H14
FI78	H14
FI79	I14
FI80	B4
FI81	C4
FI82	C5
FI83	C6
FI84	C8
FIC3	F2
II60	B10
II61	D11
II62	D11
II63	D11
II64	E11
II65	E10
II66	E10
II68	B11
II92	E13
II93	G13
II94	G14
II97	F14
IIG0	J7
IIH6	I9

SSB: I/O: 7


B14G
I/O: 7
HDI : RGB-YPbPr
RGB-OUTPUT SELECTION
RESERVED
BA7657F
7I55
R1-IN
R2-IN
G1-IN
G2-IN
B1-IN
B2-IN
VD1-IN
VD2-IN
HD1-IN
HD2-IN
HD-S-SIG-DET
C-V-IN
CTL
R-OUT
G-OUT
B-OUT
VD-OUT
HD-OUT
C-S-OUT
DET
SYNC SEPA
LOGIC
GROUND
VCC
+5VIO
+8V-VIDEO
+8V
REF1
REF2
REF3
AV6-R
R-DVI
AV6-G
G-DVI
AV6-B
B-DVI
AV6-V
V-DVI
AV6-H
H-DVI
B14f
B14g (3x),f,B15b
SWITCH-MAIN
B19a,d
V-2FH-AD-OUT
B19d
H-2FH-DIV-2
B14c,g
B-VGA
G-VGA
R-VGA
B14c,B19a
VS-2FH
HS-2FH
B14f,B19d
HS-DET
B2,B14a,B15a
AV3-CVBS-IN
7I56 BC847BW
7I57 BC847BW
7I58 BC847BW
SC2-R_C-IN_AV2
SC2-G-IN
SC2-B-IN_C-OUT
B2,B14b,B15a
R-VGA-BUF
G-VGA-BUF
B-VGA-BUF
B14g (2x)
7I41 BFR93AW
7I54-1 TSH95ID
7I54-2 TSH95ID
7I54-3 TSH95ID
7I54-4 TSH95ID
STANDBY1
STANDBY2
Y-2FH
V-2FH
U-2FH
B19a
B19a(2x)
BAS316
BZX384-C3V9
RES
8204 000 8478.1
F_15460_037.eps
080405

2I09	I10
2IF0	I9
2IF1	F9
2IF2	D9
2IF3	B9
2IF4	H6
2IF5	H7
2IF6	A13
2IF8	D2
2IF9	D2
2IH6	D2
2IH7	D2
2IH8	C2
2IH9	C2
2IK1	C5
2IK2	H10
2IK3	H11
2IK4	I10
2IN8	E3
2IN9	E3
3IG0	G8
3IG1	F8
3IG3	E8
3IG4	D8
3IG6	C8
3IG7	C8
3IG9	H10
3IHA	F9
3IHB	E9
3IHC	C9
3IJ6	C11
3IJ7	C12
3IK0	G3
3IT7	G3
3IT8	G3
3IU0	H5
3IU1	G13
3IU2	B13
3IU3	H13
3IU5	D11
3IU6	E12
3IU7	E12
3IU8	E13
3IU9	F11
3IV4	C7
3IV5	D6
3IV6	D6
3IV7	E13
3IV8	F11
3IV9	F13
3IW1	H10
3IW2	E11
3IW7	B11
3IW8	B11
3IZ0	F12
3IZ1	F12
3IZ2	F13
3IZ3	B11
3IZ4	B11
3IZ5	B11
3IZ6	C13
3IZ7	B12
3IZ8	B13
3IZ9	A12
5I12	H6
5I13	H6
5I42	E2
6I80	H10
6I81	I10
6IA1	H10
7I41	C12
7I54-A	A13
7I54-B	C13
7I54-C	D13
7I54-D	F13
7I55	C4
7I56	C8
7I57	D8
7I58	F8
9I23	B13
9I28	C12
9I29	B4
9I45	D11
9I49	F11
9I81	F4
9I84	E7
9I88	F4
9I91	B4
9I98	B4
FIB2	G2
FIB3	I10
FIB5	H6
FIB6	G13
FIB7	G13
FIB8	H10
FIB9	H10
FIC2	E2
II30	E3
II31	E3
IIB4	B11
IIB5	B12
IIB6	D11
IIB7	E12
IIB8	E11
IIB9	F12
IIF2	B6
IIF3	C6
IIF4	D6
IIF5	C8
IIF6	D8
IIF7	F8
IIH7	C12
IIH8	C11

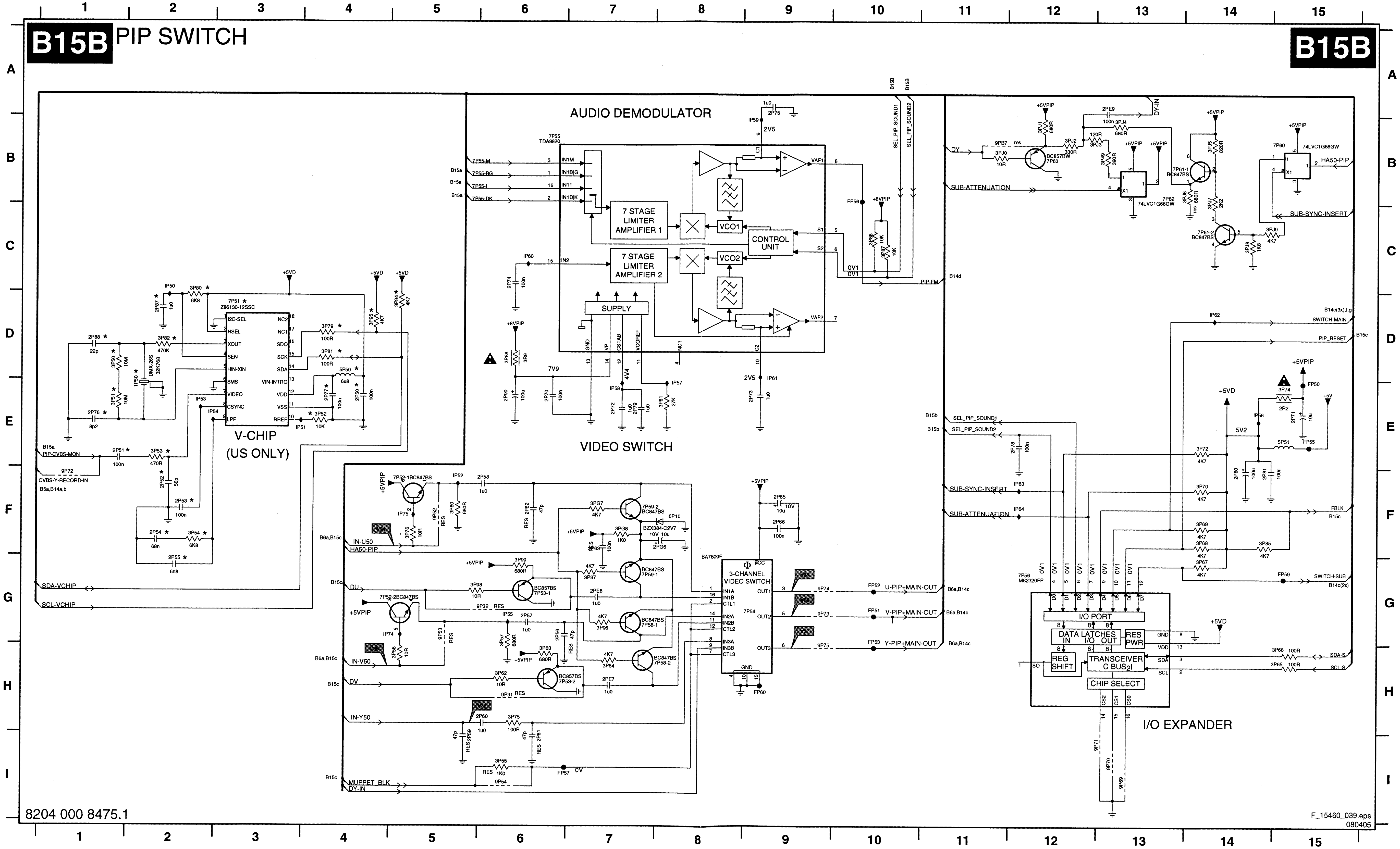
SSB: PIP HIP


B15A
PIP HIP
B15A
SAW-FILTER AUDIO
1P04 OFWK9656L
SAW-FILTER VIDEO
1P05 OFWM1967L
SAW-FILTER VIDEO
1P06 OFWK3953L
COIL 40.4 SUPPRESSION
MODULATOR COIL
1P08 TPWKA
1P09 TPWKA
1P07 SFSKA 4M5
HIP
7P09 TDA9321H/N2
SUPPLY
CTRL
SYNC
IF DEM
GROUP DELAY COR.
I/O SWITCH
LUMA & CHROMA PROC.
OUTP SWITCH
7P11 TDA9181
CLAMP
CLAMP
2H/4H DELAY
ADAPTIVE COMB FILTER
SAND-CASTLE
FILTER TUNING
CLOCK GEN
SFSRH
+5V
+5VHIP
+8V
+8VHIP
+8VPIP
GND_DEC
SIF-OUT
PIP-COMB-Y_CVBS-OUT
PIP-COMB-C-OUT
8204 000 8475.1
F_15460_038.eps
080405

1P00	E11
1P03	E13
1P04	C4
1P05	E4
1P06	G4
1P07	H7
1P08	E5
1P09	E6
1P10	E13
1P11	F14
1P12	E12
2P00	B1
2P01	B2
2P02	B2
2P03	C1
2P04	D2
2P05	D5
2P06	G3
2P07	G3
2P08	H3
2P09	B8
2P10	F8
2P11	F8
2P12	F8
2P13	F8
2P14	F8
2P15	F8
2P16	F7
2P17	E7
2P18	D7
2P19	D6
2P20	C7
2P21	C7
2P22	C6
2P23	B7
2P24	B7
2P25	B6
2P26	B8
2P27	B8
2P28	B9
2P29	B11
2P30	B11
2P31	C11
2P32	C11
2P33	C11
2P34	F11
2P35	F11
2P36	F11
2P37	F11
2P38	F12
2P39	F12
2P40	F12
2P41	F13
2P42	F13
2P43	F13
2P44	F14
2P45	C11
2P46	D11
2P47	D11
2P48	D11
2P49	D6
2P91	G11
2P92	I12
2P93	G14
2P94	G14
2P95	G13
2P96	G12
2P97	F14
2P98	B7
2P99	B7
2PG0	C7
2PG1	C7
2PG2	F7
3P00	B2
3P01	B3
3P02	B3
3P03	B5
3P04	B5
3P05	B5
3P06	B5
3P07	D2
3P08	D2
3P09	E3
3P10	D5
3P11	E5
3P12	E2
3P13	F2
3P14	F5
3P15	G5
3P16	G5
3P17	G2
3P18	G2
3P19	G2
3P20	H1
3P21	B7
3P22	B10
3P23	B10
3P24	B11
3P25	D7
3P26	D7
3P27	E6
3P28	E6
3P29	E11
3P30	F9
3P31	F8
3P32	F7
3P33	I6
3P34	G9
3P35	G9
3P36	H7
3P37	H7
3P38	H6
3P39	G7
3P40	F6
3P41	D13
3P42	D13
3P43	D13
3P44	F9
3P45	H11
3P46	H11
3P47	I12
3P48	B8
3P71	F7
3P90	E12
3P91	E13
3P92	E14
3P93	E14
5P00	A2
5P01	B3
5P02	C1
5P03	A1
5P04	D3
5P05	E5
5P06	E6
5P07	H2
5P08	C6
5P09	B7
5P10	B7
5P11	F7
6P00	E2
6P01	E2
6P02	G2
6P03	D2
7P00	D2
7P01	F2
7P02	H1
7P03	F5
7P04	G5
7P05	D6
7P06	E7
7P07-1	H7
7P07-2	I6
7P08	F9
7P09	D9
7P10	D13
7P11	G11
9P00	E6
9P01	C3
9P02	D5
9P03	D6
9P04	E2
9P05	E5
9P06	E7
9P07	F7
9P08	G6
9P09	F6
9P10	F3
9P11	E3
9P12	G8
9P13	D11
9P14	G6
9P15	E7
9P16	E3
9P17	H6
9P18	G7
9P19	H5
9P20	F11
9P21	G11
9P22	G11
9P23	H6
9P24	G9
9P25	F9
9P26	E11
9P27	E11
9P28	F12
9P29	F13
9P30	F7
AP02	C1
AP04	C4
AP05	C4
AP06	C5
AP07	C5
AP09	G3
FP02	B8
FP03	C1
FP08	B5
FP11	I7
FP12	G9
FP13	F7
FP14	E6
FP15	D7
FP16	C7
FP17	F7
FP23	B11
FP24	D12
FP25	D12
FP26	D12
FP27	D5
FP29	H11
FP36	G9
FP37	C12
FP38	C12
FP39	C12
FP40	C12
FP41	H8
FP42	H9
IP00	B5
IP01	E5
IP02	B5
IP03	E5
IP10	H8
IP17	C7
IP20	B8
IP21	B9
IP22	D5
IP23	A2
IP24	A3
IP25	B2
IP26	B4
IP27	B3
IP28	B3
IP29	B4
IP30	A3
IP31	B3
IP32	C3
IP33	B6
IP34	B7
IP35	B7
IP36	B10
IP37	H11
IP38	H11
IP39	H12
IP40	G13
IP41	G14
IP42	G13
IP43	G14
IP68	F2
IP69	F5
IP70	G5
IP71	E7
IP72	F9
IP73	D14
cP00	A8
cP01	A8

SSB: PIP Switch

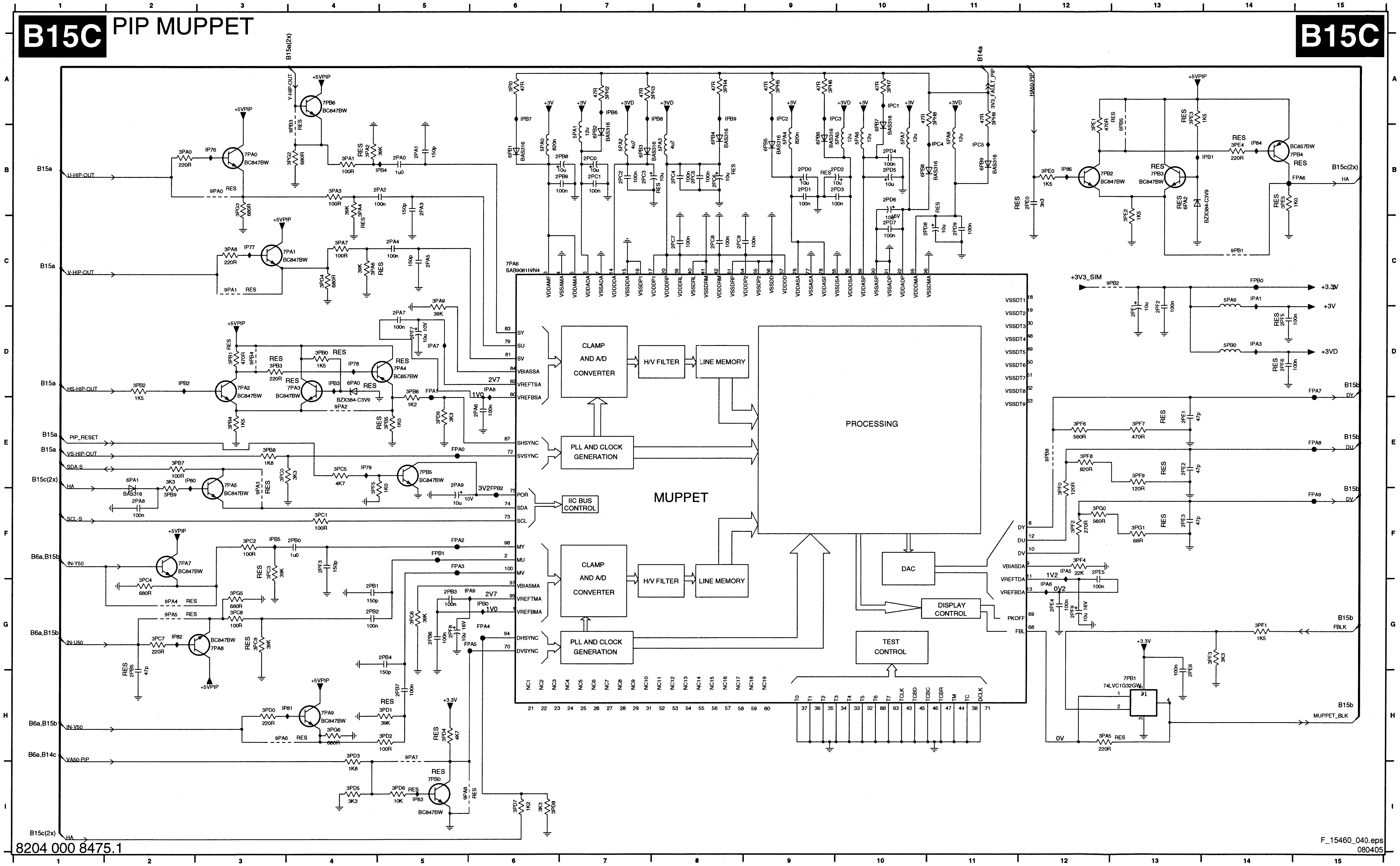
1P50	E2
2P50	E4
2P51	E1
2P52	F2
2P53	F2
2P54	F2
2P55	G2
2P56	G6
2P57	G6
2P58	F6
2P59	I5
2P60	H6
2P61	I6
2P62	F6
2P63	F7
2P65	F9
2P66	F9
2P70	E6
2P71	E15
2P72	E7
2P73	E9
2P74	C6
2P75	A9
2P76	E1
2P77	E4
2P78	E12
2P79	E7
2P80	F14
2P81	F14
2P87	D2
2P88	D1
2P90	E6
2PE7	H7
2PE8	G7
2PE9	A13
2PG6	F8
3P49	B13
3P50	D1
3P51	E1
3P52	E4
3P53	E2
3P54	F2
3P55	I6
3P56	H5
3P57	G6
3P60	F5
3P61	E8
3P62	H6
3P63	H6
3P64	H7
3P65	H15
3P66	H15
3P67	G14
3P68	F14
3P69	F14
3P70	F14
3P72	E14
3P74	E15
3P75	H6
3P76	F5
3P79	D4
3P80	C2
3P81	D4
3P82	D2
3P85	F14
3P86	C10
3P87	C10
3P88	D6
3P94	D5
3P95	D4
3P96	G7
3P97	G7
3P96	G5
3P99	G6
3PG7	F7
3PG8	F7
3PJ0	B11
3PJ1	B12
3PJ2	B12
3PJ3	B12
3PJ4	B13
3PJ5	B14
3PJ6	B14
3PJ7	B14
3PJ8	C14
3PJ9	C14
5P50	D4
5P51	E15
6P10	F8
7P51	D3
7P52-1	F5
7P52-2	G4
7P53-1	G6
7P53-2	H6
7P54	G9
7P55	B6
7P56	G12
7P58-1	G7
7P58-2	H7
7P59-1	G7
7P59-2	F7
7P60	B15
7P61-1	B14
7P61-2	C14
7P62	B13
7P63	B12
9P31	H6
9P32	G6
9P52	F5
9P53	G5
9P54	I6
9P69	I13
9P70	I13
9P71	I13
9P72	F1
9P73	G9
9P74	G9
9P75	H9
9PB7	B11
FP50	E15
FP51	G10
FP52	G10
FP53	G10
FP55	E15
FP56	B10
FP57	I6
FP59	G15
FP60	H9
IP50	C2
IP51	E3
IP52	F5
IP53	E2
IP54	E2
IP55	G6
IP56	E14
IP57	E8
IP58	E7
IP59	B9
IP60	C6
IP61	D9
IP62	D14
IP63	F12
IP64	F12
IP74	G4
IP75	F5



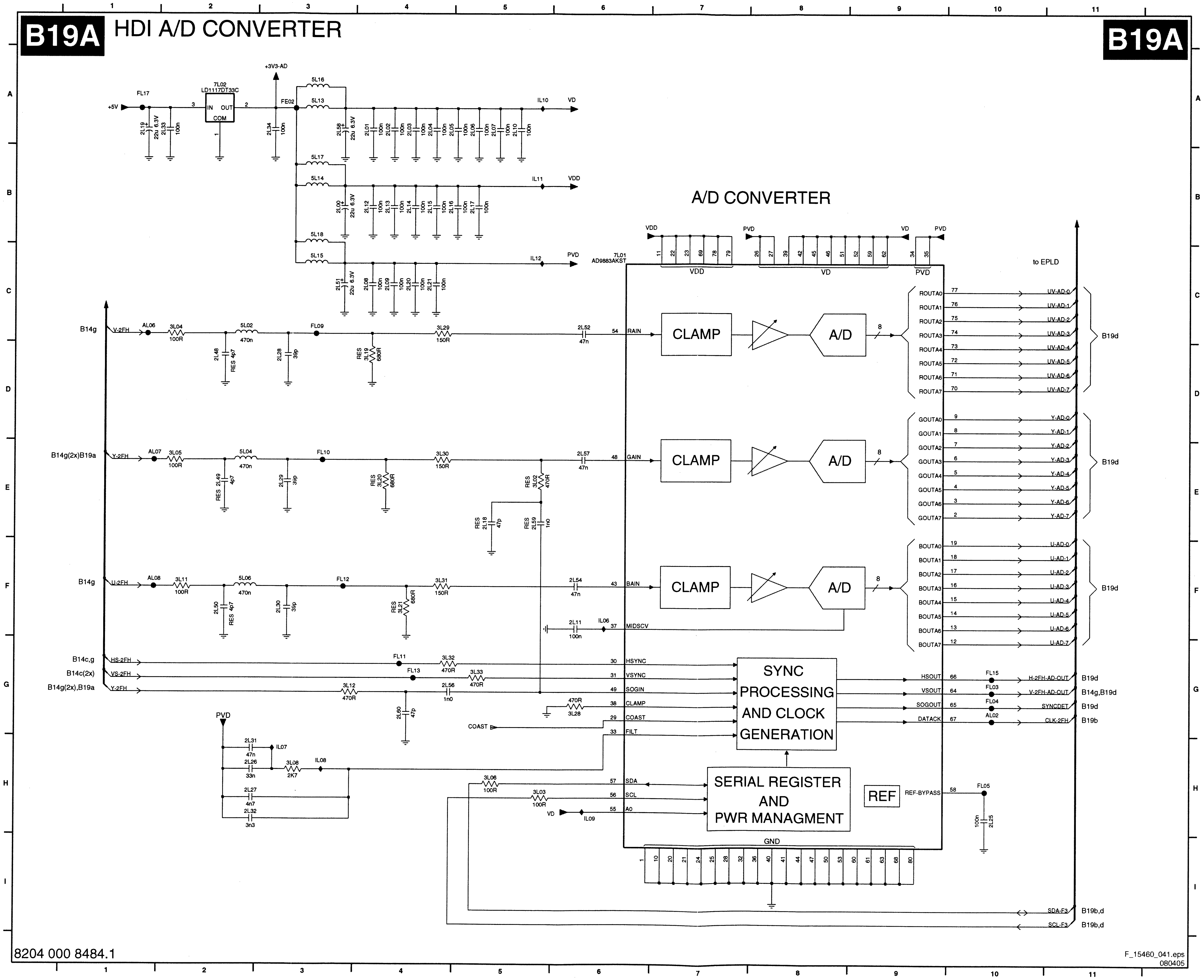
B15B PIP SWITCH
B15B
AUDIO DEMODULATOR
7P55
TDA9820
7 STAGE LIMITER AMPLIFIER 1
7 STAGE LIMITER AMPLIFIER 2
VCO1
VCO2
CONTROL UNIT
SUPPLY
IN1M
IN1B|G
IN11
IN1D|K
IN2
VAF1
VAF2
GND
VP
CSTAB
VCOREF
NC1
2V5
7V9
4V4
7P55-M
7P55-BG
7P55-I
7P55-DK
B15a
SEL_PIP_SOUND1
SEL_PIP_SOUND2
PIP-FM
B14d
VIDEO SWITCH
V-CHIP
(US ONLY)
7P51
Z86130-12SSC
I2C-SEL
HSEL
XOUT
SEN
HIN-XIN
SMS
VIDEO
CSYNC
LPF
NC2
NC1
SDO
SCK
SDA
VIN-INTRO
VDD
VSS
RREF
+5VD
PIP-CVBS-MON
CVBS-Y-RECORD-IN
B5a,B14a,b
SDA-VCHIP
SCL-VCHIP
IN-U50
HA50-PIP
DU
IN-V50
DV
IN-Y50
MUPPET_BLK
DY-IN
B6a,B15c
B15c
+5VPIP
+8VPIP
BA7609F
3-CHANNEL VIDEO SWITCH
7P54
IN1A
IN1B
CTL1
IN2A
IN2B
CTL2
IN3A
IN3B
CTL3
OUT1
OUT2
OUT3
VCC
GND
U-PIP+MAIN-OUT
V-PIP+MAIN-OUT
Y-PIP+MAIN-OUT
B6a,B14c
BC847BS
BC857BS
BZX384-C2V7
DY
SUB-ATTENUATION
SUB-SYNC-INSERT
74LVC1G66GW
HA50-PIP
SWITCH-MAIN
PIP_RESET
FBLK
SWITCH-SUB
SDA-S
SCL-S
B14c(3x),f,g
B15c
B14c(2x)
7P56
M62320FP
I/O PORT
DATA LATCHES IN I/O OUT
RES PWR
REG SHIFT
TRANSCEIVER C BUS2I
CHIP SELECT
I/O EXPANDER
+5VD
+5V
5V2
0V1
0V
8204 000 8475.1
F_15460_039.eps
080405

SSB: PIP Muppet

2PA0 B5	2PA7 D5	2PB4 G5	2PC1 B7	2PC8 C8	2PD5 B10	2PE2 E13	2PF3 F4	3PA1 B4	3PA8 C3	3PB5 E5	3PC2 F3	3PC9 G3	3PD6 I5	3PE3 A13	3PF4 F12	3PG1 F13	3PH3 A7	3PI0 A6	5PA6 B10	6PA2 B13	6PB7 B10	7PA4 D5	7PB1 H13	9PA1 C3	9PA8 I5	FPA0 E5	FPA7 D15	IP77 C3	IP84 B14	IPA8 D6	IPB5 F3	IPC3 A9
2PA1 B5	2PA8 F2	2PB5 H2	2PC2 B7	2PC9 C8	2PD6 B10	2PE3 F13	2PF5 D14	3PA2 B4	3PA9 C5	3PB6 D5	3PC3 F3	3PD0 H3	3PD7 I6	3PE4 B14	3PF5 F4	3PG2 B4	3PH4 A8	5PA0 B6	5PA7 B10	6PB1 B6	6PB8 B10	7PA5 E3	7PB2 B12	9PA2 E4	9PB1 C14	FPA1 D5	FPA8 E15	IP78 D4	IP85 B12	IPA9 G6	IPB6 A7	IPC4 B11
2PA2 B5	2PA9 E5	2PB6 G5	2PC3 B7	2PD0 B9	2PD7 C10	2PE4 G12	2PF6 D14	3PA3 B4	3PB0 D4	3PB7 E2	3PC4 G2	3PD1 H5	3PD8 I6	3PE5 B14	3PF6 E12	3PG3 B3	3PH5 A9	5PA1 B7	5PA8 B11	6PB2 B7	6PB9 B11	7PA6 C6	7PB3 B13	9PA3 F3	9PB2 C13	FPA2 F5	FPA9 F15	IP79 E4	IPA1 C14	IPB0 G6	IPB7 A6	IPC5 B11
2PA3 B5	2PB0 F4	2PB7 H5	2PC4 B8	2PD1 B9	2PD8 C10	2PE5 F12	2PF7 D5	3PA4 B4	3PB1 D3	3PB8 E3	3PC5 E4	3PD2 H5	3PD9 E5	3PF0 F12	3PF7 E13	3PG4 C4	3PH6 A9	5PA2 B7	5PA9 C14	6PB3 B7	7PA0 B3	7PA7 F2	7PB4 B14	9PA4 G2	9PB3 B4	FPA3 F5	FPB0 C14	IP80 E2	IPA3 D14	IPB1 B14	IPB8 A8	
2PA4 C5	2PB1 G4	2PB8 B7	2PC5 B8	2PD2 B10	2PD9 C11	2PE6 H13	2PF8 G5	3PA5 H12	3PB2 D2	3PB9 F2	3PC6 G5	3PD3 H4	3PE0 B12	3PF1 G14	3PF8 E12	3PG5 G3	3PH7 A10	5PA3 B8	5PB0 D14	6PB4 B8	7PA1 C3	7PA8 G3	7PB5 E5	9PA5 G2	9PB4 D3	FPA4 G6	FPB1 F5	IP81 H4	IPA5 F12	IPB2 D2	IPB9 A8	
2PA5 C5	2PB2 G4	2PB9 B7	2PC6 B8	2PD3 B10	2PE0 B12	2PF1 D13	2PF9 G12	3PA6 C4	3PB3 D3	3PC0 E3	3PC7 G2	3PD4 H5	3PE1 B12	3PF2 F12	3PF9 E13	3PG6 H4	3PH8 A11	5PA4 B9	6PA0 D4	6PB5 B9	7PA2 D3	7PA9 H4	7PB6 A4	9PA6 H3	9PB5 B13	FPA5 G6	FPB2 F6	IP82 G2	IPA6 G12	IPB3 D4	IPC1 A10	
2PA6 E6	2PB3 G5	2PC0 B7	2PC7 C8	2PD4 B10	2PE1 E13	2PF2 D13	3PA0 B2	3PA7 C4	3PB4 E3	3PC1 F4	3PC8 G3	3PD5 I4	3PE2 C13	3PF3 G14	3PG0 F12	3PH2 A7	3PH9 A11	5PA5 B10	6PA1 E2	6PB6 B9	7PA3 D4	7PB0 I5	9PA0 B3	9PA7 H5	9PB8 E12	FPA6 B15	IP76 B3	IP83 I5	IPA7 D5	IPB4 B5	IPC2 A9	

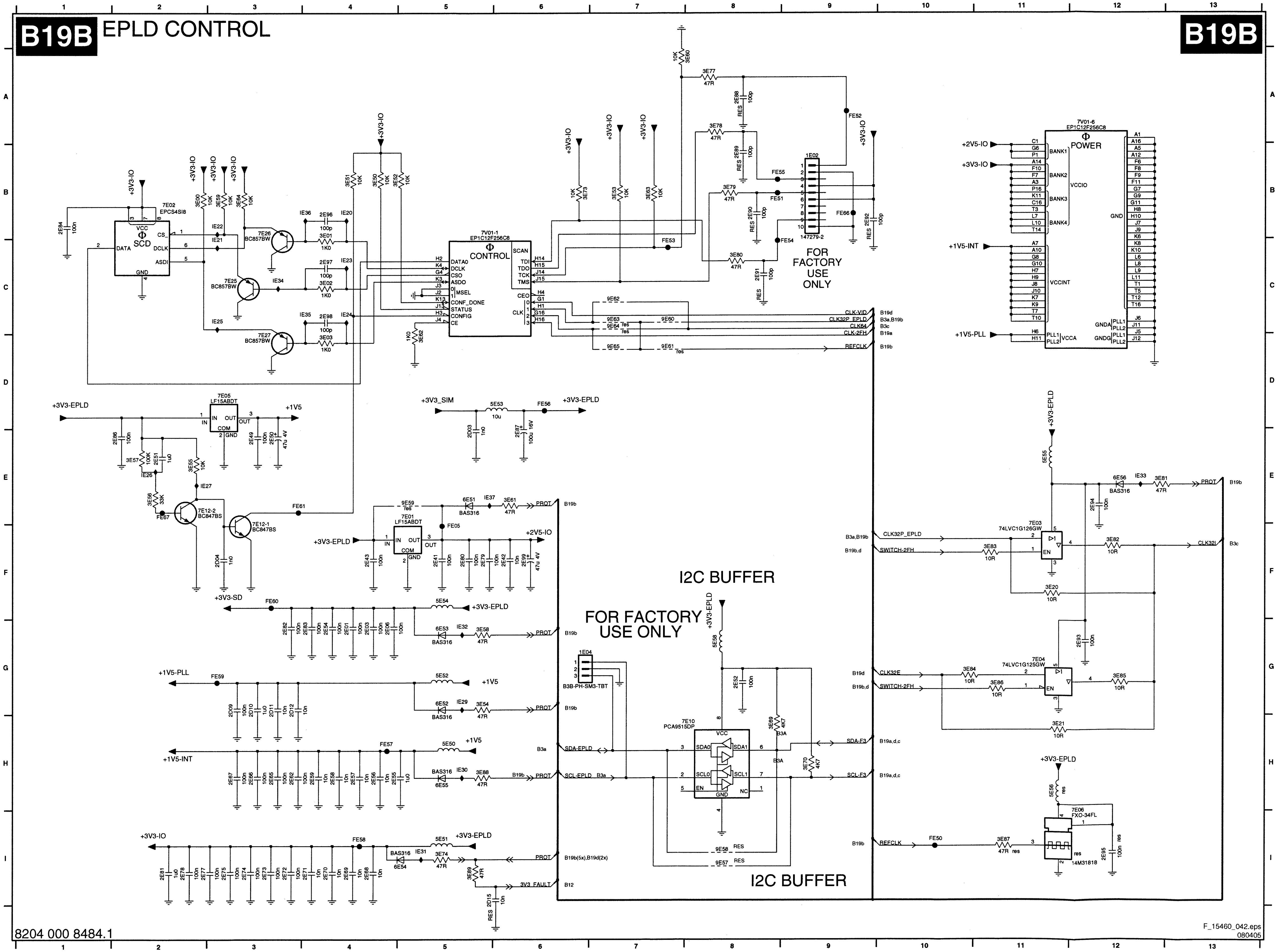

B15C
PIP MUPPET
B15C
B15a(2x)
B14a
Y-HIP-OUT
3V3_FAULT_PIP
HA50-PIP
+5VPIP
+3V
+3VD
B15a
U-HIP-OUT
V-HIP-OUT
HS-HIP-OUT
PIP_RESET
VS-HIP-OUT
SDA-S
HA
SCL-S
B15c(2x)
B6a,B15b
IN-Y50
IN-U50
IN-V50
B6a,B14c
VA50-PIP
7PA6
SAB9081H/N4
MUPPET
CLAMP AND A/D CONVERTER
H/V FILTER
LINE MEMORY
PLL AND CLOCK GENERATION
IIC BUS CONTROL
PROCESSING
DAC
DISPLAY CONTROL
TEST CONTROL
SY
SU
SV
VBIASSA
VREFTSA
VREFBSA
SHSYNC
SVSYNC
POR
SDA
SCL
MY
MU
MV
VBIASMA
VREFTMA
VREFBMA
DHSYNC
DVSYNC
DY
DU
DV
VBIASDA
VREFTDA
VREFBDA
PKOFF
FBL
2V7
1V0
3V2
1V2
0V2
0V
+3V3_SIM
+3.3V
+3V
+3VD
B15b
DY
DU
DV
FBLK
MUPPET_BLK
7PB1
74LVC1G32GW
BC847BW
BC857BW
BZX384-C3V9
BAS316
RES
8204 000 8475.1
F_15460_040.eps
080405

SSB: HDI A/D Converter


B19A
HDI A/D CONVERTER
B19A
A/D CONVERTER
+3V3-AD
+5V
FL17
7L02
LD1117DT33C
IN
OUT
COM
FE02
5L16
5L13
5L17
5L14
5L18
5L15
IL10
VD
IL11
VDD
IL12
PVD
7L01
AD9883AKST
VDD
VD
PVD
B14g
V-2FH
AL06
3L04
100R
5L02
470n
FL09
3L29
150R
2L52
47n
RAIN
B14g(2x)B19a
Y-2FH
AL07
3L05
100R
5L04
470n
FL10
3L30
150R
2L57
47n
GAIN
B14g
U-2FH
AL08
3L11
100R
5L06
470n
FL12
3L31
150R
2L54
47n
BAIN
2L11
100n
IL06
MIDSCV
CLAMP
A/D
8
ROUTA0
ROUTA1
ROUTA2
ROUTA3
ROUTA4
ROUTA5
ROUTA6
ROUTA7
GOUTA0
GOUTA1
GOUTA2
GOUTA3
GOUTA4
GOUTA5
GOUTA6
GOUTA7
BOUTA0
BOUTA1
BOUTA2
BOUTA3
BOUTA4
BOUTA5
BOUTA6
BOUTA7
to EPLD
UV-AD-0
UV-AD-1
UV-AD-2
UV-AD-3
UV-AD-4
UV-AD-5
UV-AD-6
UV-AD-7
Y-AD-0
Y-AD-1
Y-AD-2
Y-AD-3
Y-AD-4
Y-AD-5
Y-AD-6
Y-AD-7
U-AD-0
U-AD-1
U-AD-2
U-AD-3
U-AD-4
U-AD-5
U-AD-6
U-AD-7
B19d
B14c,g
HS-2FH
B14c(2x)
VS-2FH
B14g(2x),B19a
Y-2FH
FL11
3L32
470R
FL13
3L33
470R
3L12
470R
2L56
1n0
2L60
47p
HSYNC
VSYNC
SOGIN
CLAMP
COAST
FILT
470R
3L28
COAST
SYNC PROCESSING AND CLOCK GENERATION
HSOUT
VSOUT
SOGOUT
DATACK
FL15
FL03
FL04
AL02
H-2FH-AD-OUT
V-2FH-AD-OUT
SYNCDET
CLK-2FH
B19d
B14g,B19d
B19d
B19b
PVD
2L31
47n
IL07
2L26
33n
3L08
2K7
IL08
2L27
4n7
2L32
3n3
3L06
100R
3L03
100R
SDA
SCL
A0
VD
IL09
SERIAL REGISTER AND PWR MANAGMENT
REF
REF-BYPASS
FL05
100n
2L25
GND
SDA-F3
SCL-F3
B19b,d
B19b,d
8204 000 8484.1
F_15460_041.eps
080405

2L00	B3
2L01	A4
2L02	A4
2L03	A4
2L04	A4
2L05	A4
2L06	A5
2L07	A5
2L08	C4
2L09	C4
2L10	A5
2L11	F6
2L12	B4
2L13	B4
2L14	B4
2L15	B4
2L16	B4
2L17	B5
2L18	E5
2L19	A1
2L20	C4
2L21	C4
2L25	H10
2L26	H2
2L27	H2
2L28	D3
2L29	E3
2L30	F3
2L31	H2
2L32	H2
2L33	A2
2L34	A3
2L48	D2
2L49	E2
2L50	F2
2L51	C3
2L52	C6
2L54	F6
2L56	G4
2L57	E6
2L58	A3
2L59	E5
2L60	G4
3L02	E5
3L03	H5
3L04	C2
3L05	E2
3L06	H5
3L08	H3
3L11	F2
3L12	G3
3L19	D4
3L20	E4
3L21	F4
3L28	G6
3L29	C4
3L30	E4
3L31	F4
3L32	G4
3L33	G5
5L02	C2
5L04	E2
5L06	F2
5L13	A3
5L14	B3
5L15	C3
5L16	A3
5L17	B3
5L18	B3
7L01	C6
7L02	A2
AL02	G10
AL06	C1
AL07	E1
AL08	F1
FE02	A3
FL03	G10
FL04	G10
FL05	H10
FL09	C3
FL10	E3
FL11	G4
FL12	F3
FL13	G4
FL15	G10
FL17	A1
IL06	F6
IL07	H3
IL08	H3
IL09	H6
IL10	A5
IL11	B5
IL12	C5

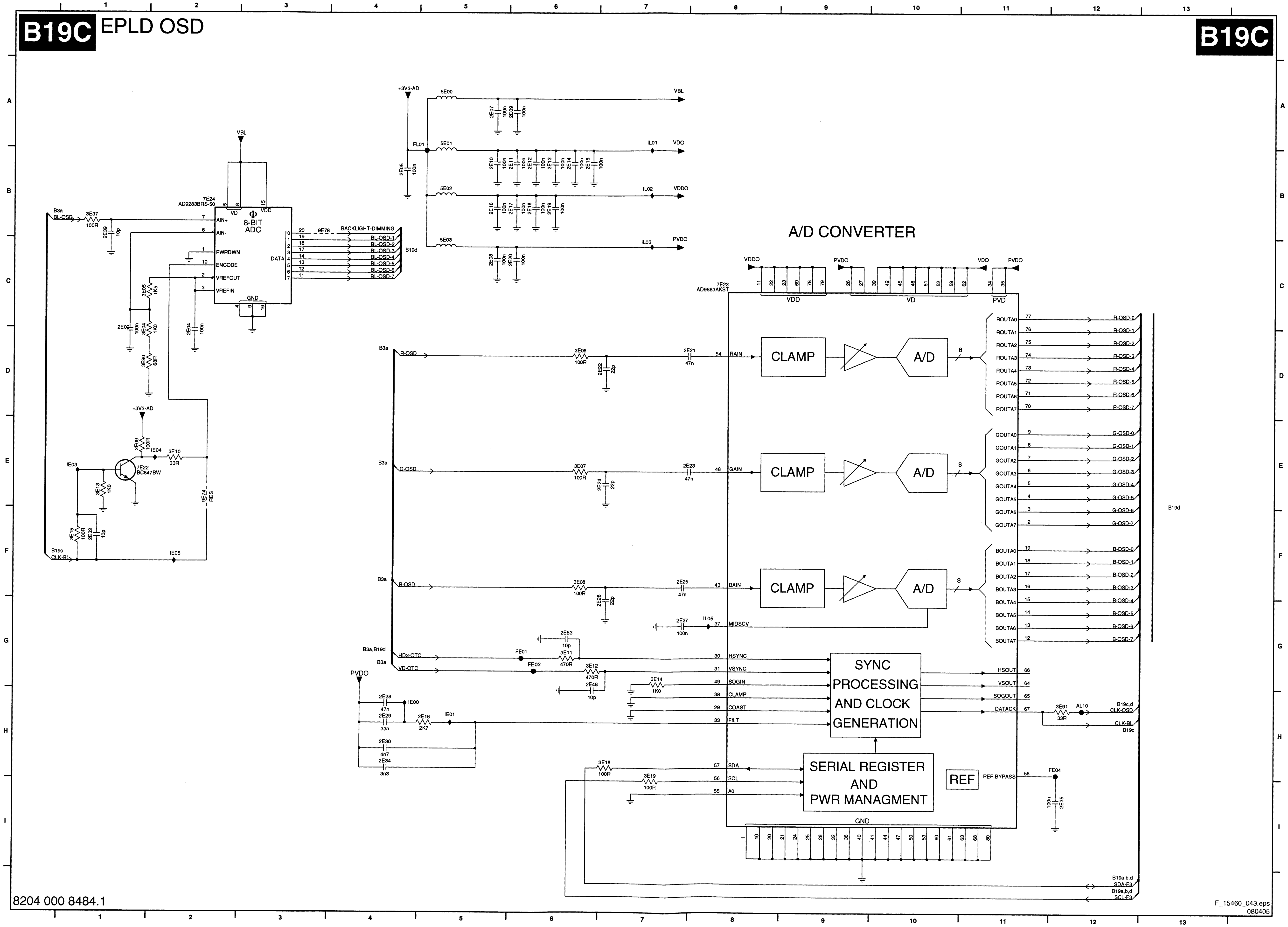
SSB: EPLD Control



B19B
EPLD CONTROL
B19B
7E02 EPCS4SI8
SCD
7V01-1 EP1C12F256C8
CONTROL
7V01-6 EP1C12F256C8
POWER
1E02 147279-2
FOR FACTORY USE ONLY
7E05 LF15ABDT
7E01 LF15ABDT
7E25 BC857BW
7E26 BC857BW
7E27 BC857BW
7E12-1 BC847BS
7E12-2 BC847BS
+3V3-EPLD
+1V5
+3V3_SIM
+3V3-SD
+1V5-PLL
+1V5-INT
+3V3-IO
+2V5-IO
3V3_FAULT
CLK-VID
CLK32P_EPLD
CLK64
CLK-2FH
REFCLK
PROT
I2C BUFFER
FOR FACTORY USE ONLY
1E04 B3B-PH-SM3-TBT
7E10 PCA9515DP
SDA-EPLD
SCL-EPLD
SDA-F3
SCL-F3
7E03 74LVC1G126GW
7E04 74LVC1G125GW
CLK32E
SWITCH-2FH
CLK32I
7E06 FXO-34FL
14M31818
I2C BUFFER
8204 000 8484.1
F_15460_042.eps 080405

1E02	B9
1E04	G6
2D03	E5
2D04	F3
2D09	G3
2D10	G3
2D11	G3
2D12	G3
2D15	I5
2E01	G4
2E03	G4
2E06	G4
2E41	F5
2E42	F6
2E43	F4
2E49	E3
2E50	E3
2E51	E2
2E52	G8
2E54	G4
2E55	H4
2E56	H4
2E57	H4
2E58	H4
2E59	H4
2E62	H3
2E65	H3
2E66	H3
2E67	H3
2E68	I4
2E69	I4
2E70	I4
2E71	I4
2E72	I3
2E73	I3
2E74	I3
2E75	I3
2E77	I2
2E78	I2
2E79	F5
2E80	F5
2E81	I2
2E82	G3
2E83	G4
2E84	B1
2E86	E2
2E87	E6
2E88	A8
2E89	B8
2E90	B8
2E91	C8
2E92	B9
2E93	G12
2E94	E12
2E95	I12
2E96	B4
2E97	C4
2E98	C4
2E99	F6
3E00	B2
3E01	B4
3E02	C4
3E03	D4
3E20	F11
3E21	H11
3E50	B4
3E51	B4
3E52	B4
3E53	B7
3E54	G5
3E55	E2
3E56	E2
3E57	E2
3E58	G5
3E59	B3
3E60	A8
3E61	E6
3E62	D5
3E63	B7
3E64	B3
3E69	H8
3E70	H9
3E73	B6
3E74	I5
3E77	A8
3E78	A8
3E79	B8
3E80	C8
3E81	E12
3E82	F12
3E83	F11
3E84	G10
3E85	G12
3E86	G11
3E87	I11
3E88	H5
3E89	I5
5E50	H5
5E51	I5
5E52	G5
5E53	D6
5E54	F5
5E55	E11
5E56	H11
5E58	G8
6E51	E5
6E52	G5
6E53	G5
6E54	I5
6E55	H5
6E56	E12
7E01	E5
7E02	B2
7E03	F11
7E04	G11
7E05	D3
7E06	I12
7E10	H8
7E12-1	F3
7E12-2	E2
7E25	C3
7E26	B3
7E27	C3
7V01-1	B5
7V01-6	A12
9E57	I8
9E58	I8
9E59	E5
9E60	C7
9E61	D7
9E62	C7
9E63	C7
9E64	C7
9E65	D7
FE05	F5
FE50	I10
FE51	B8
FE52	A9
FE53	C7
FE54	C9
FE55	B8
FE56	D6
FE57	H4
FE58	I4
FE59	G3
FE60	F3
FE61	E3
FE66	B9
FE67	E2
IE20	B4
IE21	C3
IE22	B3
IE23	C4
IE24	C4
IE25	C3
IE26	E2
IE27	E2
IE29	G5
IE30	H5
IE31	I5
IE32	G5
IE33	E12
IE34	C3
IE35	C4
IE36	B4
IE37	E5

SSB: EPLD OSD


B19C
EPLD OSD
B19C
A/D CONVERTER
7E24
AD9283BRS-50
8-BIT
ADC
VD
VDD
GND
AIN+
AIN-
PWRDWN
ENCODE
VREFOUT
VREFIN
DATA
BACKLIGHT-DIMMING
BL-OSD-1
BL-OSD-2
BL-OSD-3
BL-OSD-4
BL-OSD-5
BL-OSD-6
BL-OSD-7
9E78
B19d
VBL
B3a
BL-OSD
3E37
100R
2E39
10p
3E05
1K5
2E02
100n
3E04
1K0
2E04
100n
3E90
68R
+3V3-AD
3E09
100R
IE04
3E10
33R
IE03
7E22
BC847BW
3E13
1K0
9E74
RES
3E15
100R
2E32
10p
B19c
CLK-BL
IE05
+3V3-AD
5E00
FL01
5E01
5E02
5E03
2E05
100n
2E07
2E09
2E10
2E11
2E12
2E13
2E14
2E15
2E16
2E17
2E18
2E19
2E08
2E20
VBL
IL01
VDO
IL02
VDDO
IL03
PVDO
7E23
AD9883AKST
VDDO
PVDO
VDO
PVDO
VDD
VD
PVD
B3a
R-OSD
3E06
100R
2E22
22p
2E21
47n
RAIN
G-OSD
3E07
100R
2E24
22p
2E23
47n
GAIN
B-OSD
3E08
100R
2E26
22p
2E25
47n
BAIN
CLAMP
A/D
8
2E27
100n
IL05
MIDSCV
ROUTA0
ROUTA1
ROUTA2
ROUTA3
ROUTA4
ROUTA5
ROUTA6
ROUTA7
R-OSD-0
R-OSD-1
R-OSD-2
R-OSD-3
R-OSD-4
R-OSD-5
R-OSD-6
R-OSD-7
GOUTA0
GOUTA1
GOUTA2
GOUTA3
GOUTA4
GOUTA5
GOUTA6
GOUTA7
G-OSD-0
G-OSD-1
G-OSD-2
G-OSD-3
G-OSD-4
G-OSD-5
G-OSD-6
G-OSD-7
BOUTA0
BOUTA1
BOUTA2
BOUTA3
BOUTA4
BOUTA5
BOUTA6
BOUTA7
B-OSD-0
B-OSD-1
B-OSD-2
B-OSD-3
B-OSD-4
B-OSD-5
B-OSD-6
B-OSD-7
B19d
B3a,B19d
HD3-OTC
VD-OTC
2E53
10p
FE01
3E11
470R
FE03
3E12
470R
2E48
10p
3E14
1K0
HSYNC
VSYNC
SOGIN
CLAMP
COAST
FILT
SYNC
PROCESSING
AND CLOCK
GENERATION
HSOUT
VSOUT
SOGOUT
DATACK
3E91
33R
AL10
B19c,d
CLK-OSD
CLK-BL
B19c
PVDO
2E28
47n
IE00
2E29
33n
3E16
2K7
IE01
2E30
4n7
2E34
3n3
3E18
100R
3E19
100R
SDA
SCL
A0
SERIAL REGISTER
AND
PWR MANAGMENT
REF
REF-BYPASS
FE04
100n
2E35
GND
B19a,b,d
SDA-F3
B19a,b,d
SCL-F3
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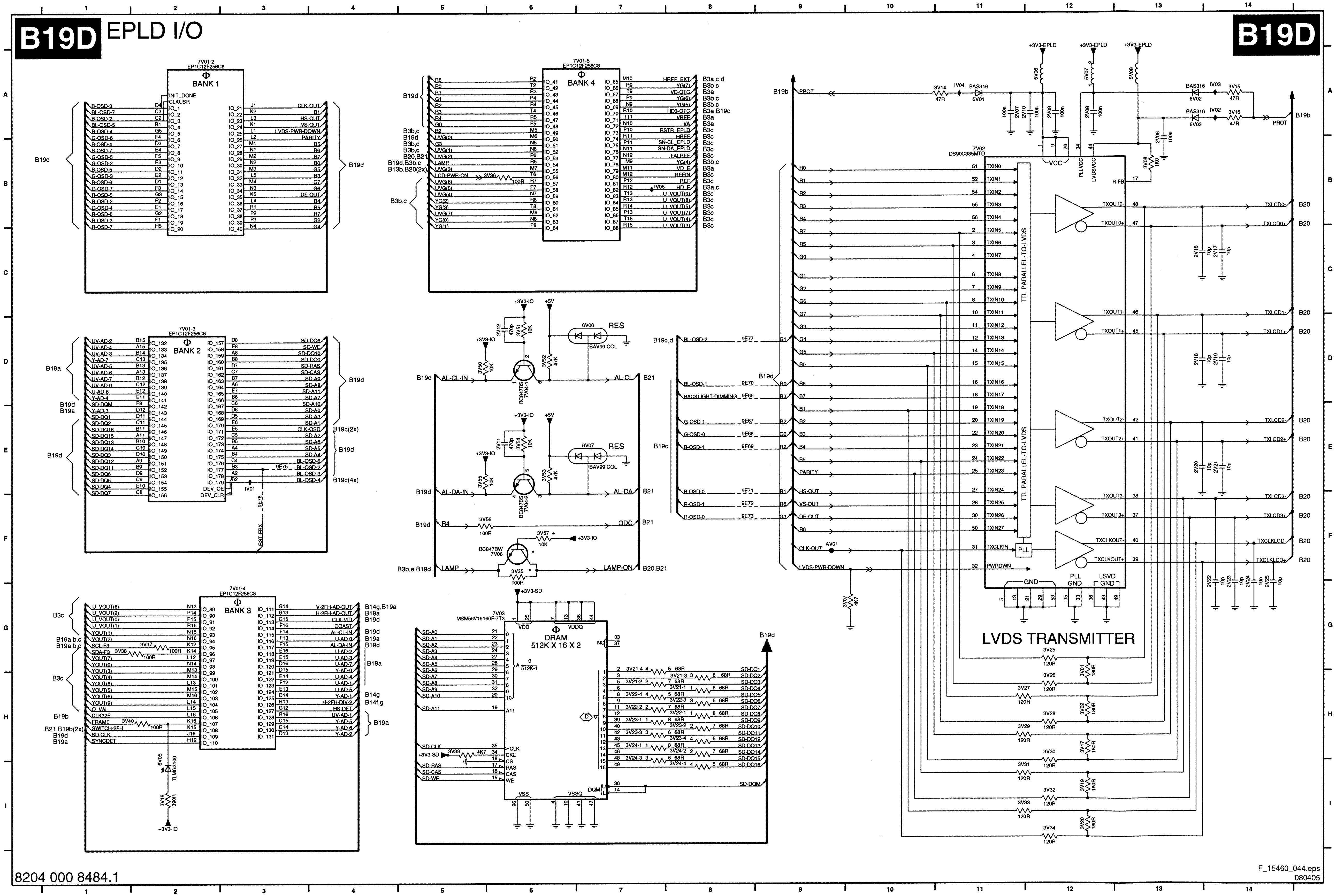
080405

2E02	D1
2E04	D2
2E05	B4
2E07	A5
2E08	C5
2E09	A6
2E10	B5
2E11	B6
2E12	B6
2E13	B6
2E14	B6
2E15	B6
2E16	B5
2E17	B6
2E18	B6
2E19	B6
2E20	C6
2E21	D8
2E22	D7
2E23	E8
2E24	E7
2E25	F7
2E26	G7
2E27	G7
2E28	H4
2E29	H4
2E30	H4
2E32	F1
2E34	H4
2E35	I12
2E39	B1
2E48	G6
2E53	G6
3E04	D1
3E05	C1
3E06	D6
3E07	E6
3E08	F6
3E09	E1
3E10	E2
3E11	G6
3E12	G6
3E13	E1
3E14	G7
3E15	F1
3E16	H5
3E18	H7
3E19	H7
3E37	B1
3E90	D1
3E91	H12
5E00	A5
5E01	A5
5E02	B5
5E03	C5
7E22	E1
7E23	C8
7E24	B2
9E74	E2
9E78	B3
AL10	H12
FE01	G6
FE03	G6
FE04	H12
FL01	A4
IE00	H4
IE01	H5
IE03	E1
IE04	E2
IE05	F2
IL01	A7
IL02	B7
IL03	C7
IL05	G8

SSB: EPLD I/O


B19D
EPLD I/O
7V01-2
EP1C12F256C8
BANK 1
7V01-5
EP1C12F256C8
BANK 4
7V01-3
EP1C12F256C8
BANK 2
7V01-4
EP1C12F256C8
BANK 3
7V02
DS90C385MTD
TTL PARALLEL-TO-LVDS
PLL
LVDS TRANSMITTER
7V03
MSM56V16160F-7T3
DRAM
512K X 16 X 2
7V04-1 BC847BS
7V04-2 BC847BS
7V06 BC847BW
6V06 BAV99 COL
6V07 BAV99 COL
RES
+3V3-EPLD
+3V3-IO
+3V3-SD
+5V
PROT
LVDS-PWR-DOWN
CLK-OUT
AL-CL-IN
AL-DA-IN
LAMP
LAMP-ON
ODC
TLMG3100
8204 000 8484.1
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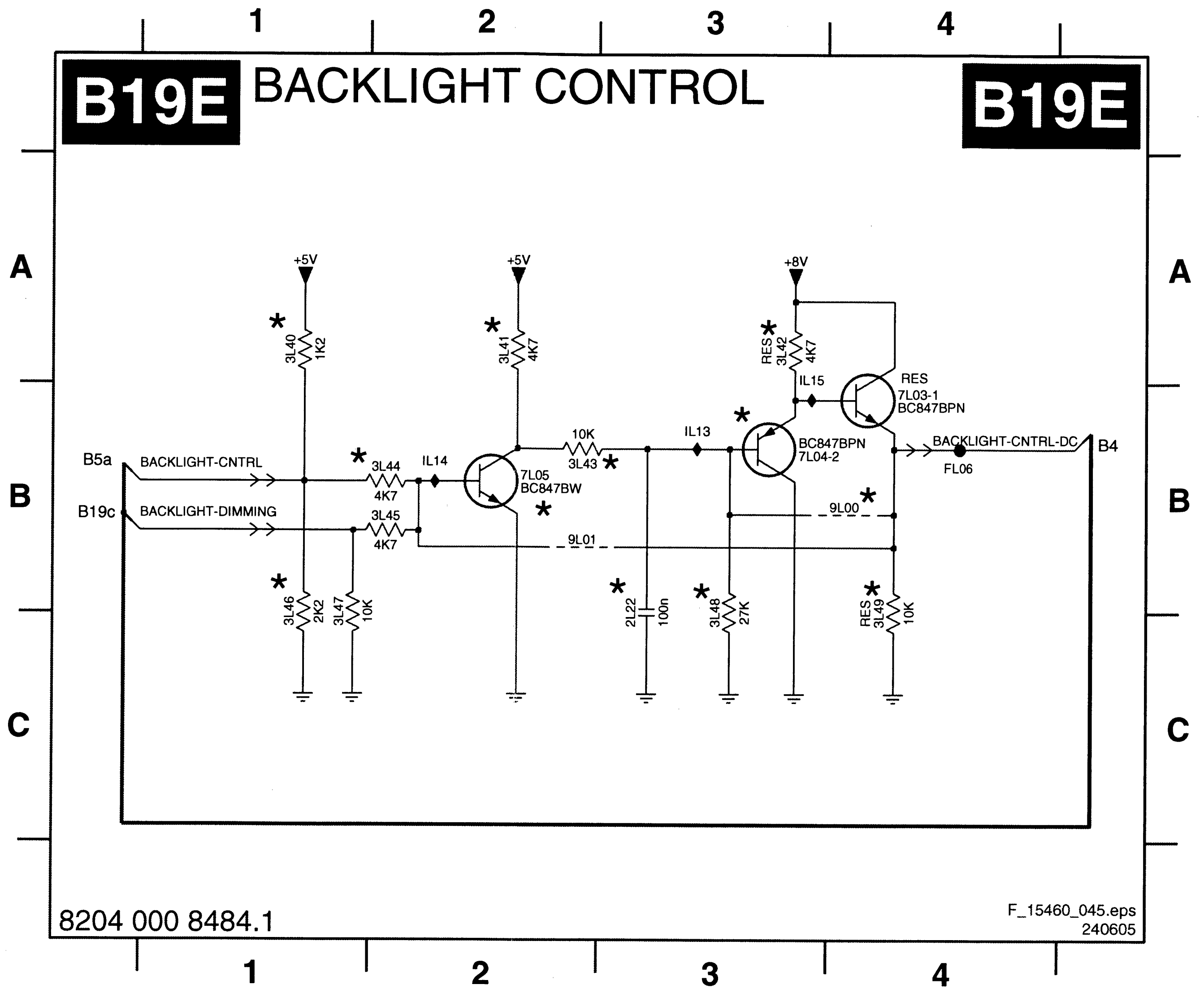
080405

2V06 B13	9E72 F8
2V07 A11	9E73 F8
2V08 A12	9E75 E3
2V09 A12	9E76 F3
2V10 A12	9E77 D8
2V11 E6	AV01 F9
2V12 D6	IV01 E3
2V16 C13	IV02 A14
2V17 C14	IV03 A14
2V18 D13	IV04 A11
2V19 D14	IV05 B7
2V20 E13	
2V21 E14	
2V22 G14	
2V23 G14	
2V24 G14	
2V25 G14	
3V01 H12	
3V02 H12	
3V07 G10	
3V08 B13	
3V14 A11	
3V15 A14	
3V16 A14	
3V17 H12	
3V18 I2	
3V19 I12	
3V20 I12	
3V21-1 H8	
3V21-2 H7	
3V21-3 H8	
3V21-4 G7	
3V22-1 H8	
3V22-2 H7	
3V22-3 H8	
3V22-4 H7	
3V23-1 H7	
3V23-2 H8	
3V23-3 H7	
3V23-4 H8	
3V24-1 H7	
3V24-2 H8	
3V24-3 H7	
3V24-4 I8	
3V25 G12	
3V26 H12	
3V27 H11	
3V28 H12	
3V29 H11	
3V30 H12	
3V31 I11	
3V32 I12	
3V33 I11	
3V34 I12	
3V35 F6	
3V36 B6	
3V37 G2	
3V38 G1	
3V39 H5	
3V40 H1	
3V50 D5	
3V51 D6	
3V52 D6	
3V53 E6	
3V54 E6	
3V55 E5	
3V56 F5	
3V57 F6	
5V06 A12	
5V07 A12	
5V08 A13	
6V01 A11	
6V02 A13	
6V03 A13	
6V05 I2	
6V06 D7	
6V07 E7	
7V01-2 A2	
7V01-3 D2	
7V01-4 G3	
7V01-5 A7	
7V02 B11	
7V03 G6	
7V04-1 D6	
7V04-2 F6	
7V06 F6	
9E66 D8	
9E67 E8	
9E68 E8	
9E69 E8	
9E70 D8	
9E71 E8	

SSB: Backlight Control

2L22 B3	3L41 A2	3L43 B2	3L45 B2	3L47 B1	3L49 B4	7L04-2 B3	9L00 B4	FL06 B4	IL14 B2
3L40 A1	3L42 A3	3L44 B2	3L46 B1	3L48 B3	7L03-1 B4	7L05 B2	9L01 B2	IL13 B3	IL15 A3


1
2
3
4
A
B
C
B19E
BACKLIGHT CONTROL
B19E
+5V
3L40
1K2
+5V
3L41
4K7
+8V
RES
3L42
4K7
IL15
RES
7L03-1
BC847BPN
10K
3L43
IL13
BC847BPN
7L04-2
BACKLIGHT-CNTRL-DC
B4
FL06
B5a
BACKLIGHT-CNTRL
3L44
4K7
IL14
7L05
BC847BW
B19c
BACKLIGHT-DIMMING
3L45
4K7
9L00
9L01
3L46
2K2
3L47
10K
2L22
100n
3L48
27K
RES
3L49
10K
8204 000 8484.1
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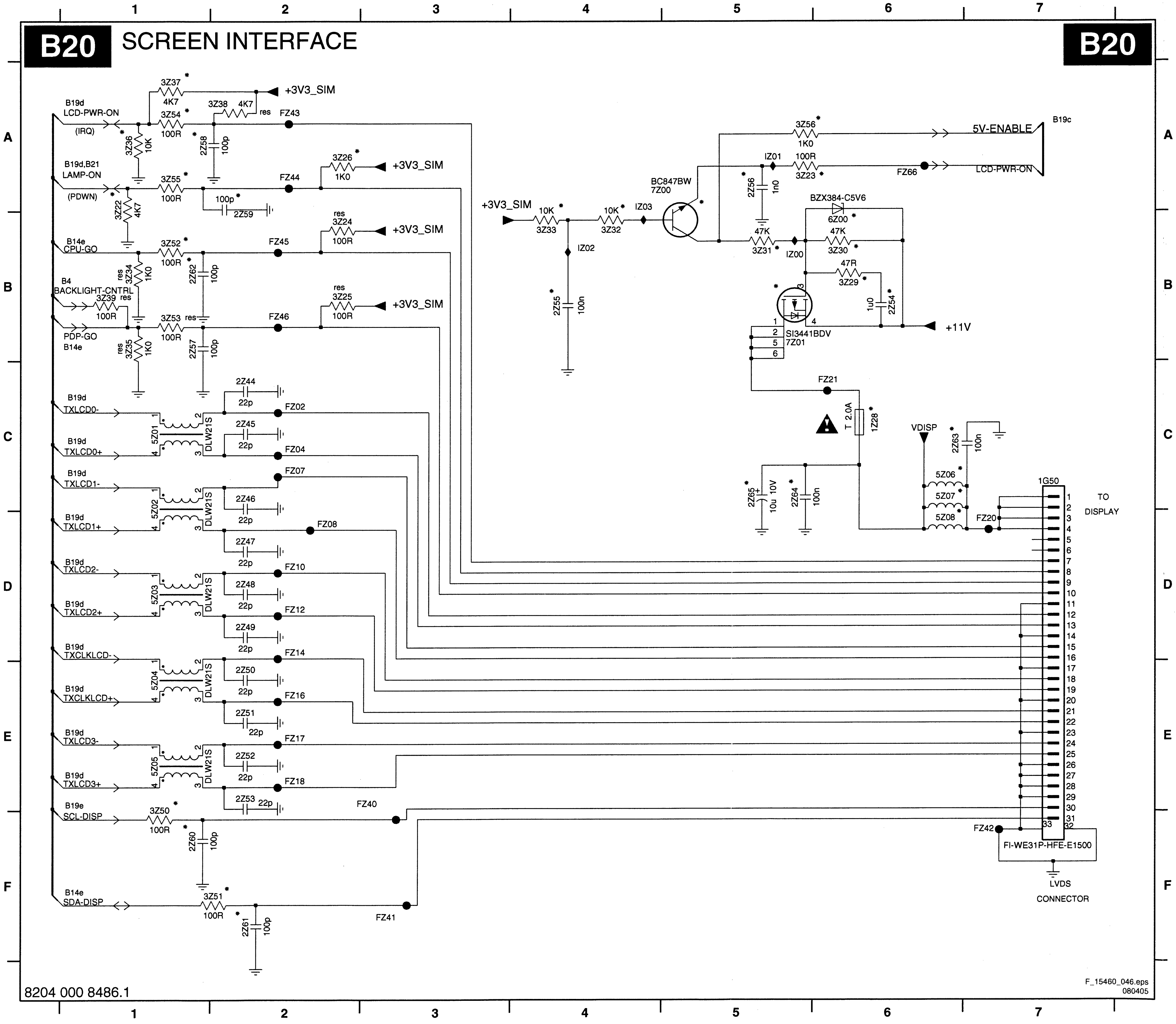
Personal Notes:

E_06532_012.eps
131004

SSB: Screen Interface


B20
SCREEN INTERFACE
B20
B19d
LCD-PWR-ON
(IRQ)
B19d,B21
LAMP-ON
(PDWN)
B14e
CPU-GO
B4
BACKLIGHT-CNTRL
PDP-GO
B14e
3Z37 4K7
3Z38 4K7 res
3Z54 100R
3Z36 10K
2Z58 100p
+3V3_SIM
FZ43
3Z26 1K0
3Z55 100R
FZ44
3Z22 4K7
100p 2Z59
3Z24 100R res
3Z52 100R
FZ45
3Z34 1K0 res
2Z62 100p
3Z39 100R res
3Z25 100R res
3Z53 100R res
FZ46
3Z35 1K0 res
2Z57 100p
B19d TXLCD0-
B19d TXLCD0+
B19d TXLCD1-
B19d TXLCD1+
B19d TXLCD2-
B19d TXLCD2+
B19d TXCLKLCD-
B19d TXCLKLCD+
B19d TXLCD3-
B19d TXLCD3+
5Z01 DLW21S
5Z02 DLW21S
5Z03 DLW21S
5Z04 DLW21S
5Z05 DLW21S
2Z44 22p
2Z45 22p
2Z46 22p
2Z47 22p
2Z48 22p
2Z49 22p
2Z50 22p
2Z51 22p
2Z52 22p
2Z53 22p
FZ02
FZ04
FZ07
FZ08
FZ10
FZ12
FZ14
FZ16
FZ17
FZ18
B19e SCL-DISP
3Z50 100R
2Z60 100p
FZ40
B14e SDA-DISP
3Z51 100R
2Z61 100p
FZ41
+3V3_SIM
10K 3Z33
10K 3Z32
IZ03
IZ02
2Z55 100n
BC847BW 7Z00
3Z56 1K0
5V-ENABLE
B19c
IZ01
100R 3Z23
2Z56 1n0
FZ66
LCD-PWR-ON
BZX384-C5V6 6Z00
47K 3Z31
IZ00
47K 3Z30
47R 3Z29
1u0 2Z54
+11V
SI3441BDV 7Z01
FZ21
T 2.0A 1Z28
VDISP
2Z63 100n
2Z65 10u 10V
2Z64 100n
5Z06
5Z07
5Z08
FZ20
1G50
TO DISPLAY
FZ42
FI-WE31P-HFE-E1500
LVDS CONNECTOR
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
A B C D E F
1 2 3 4 5 6 7

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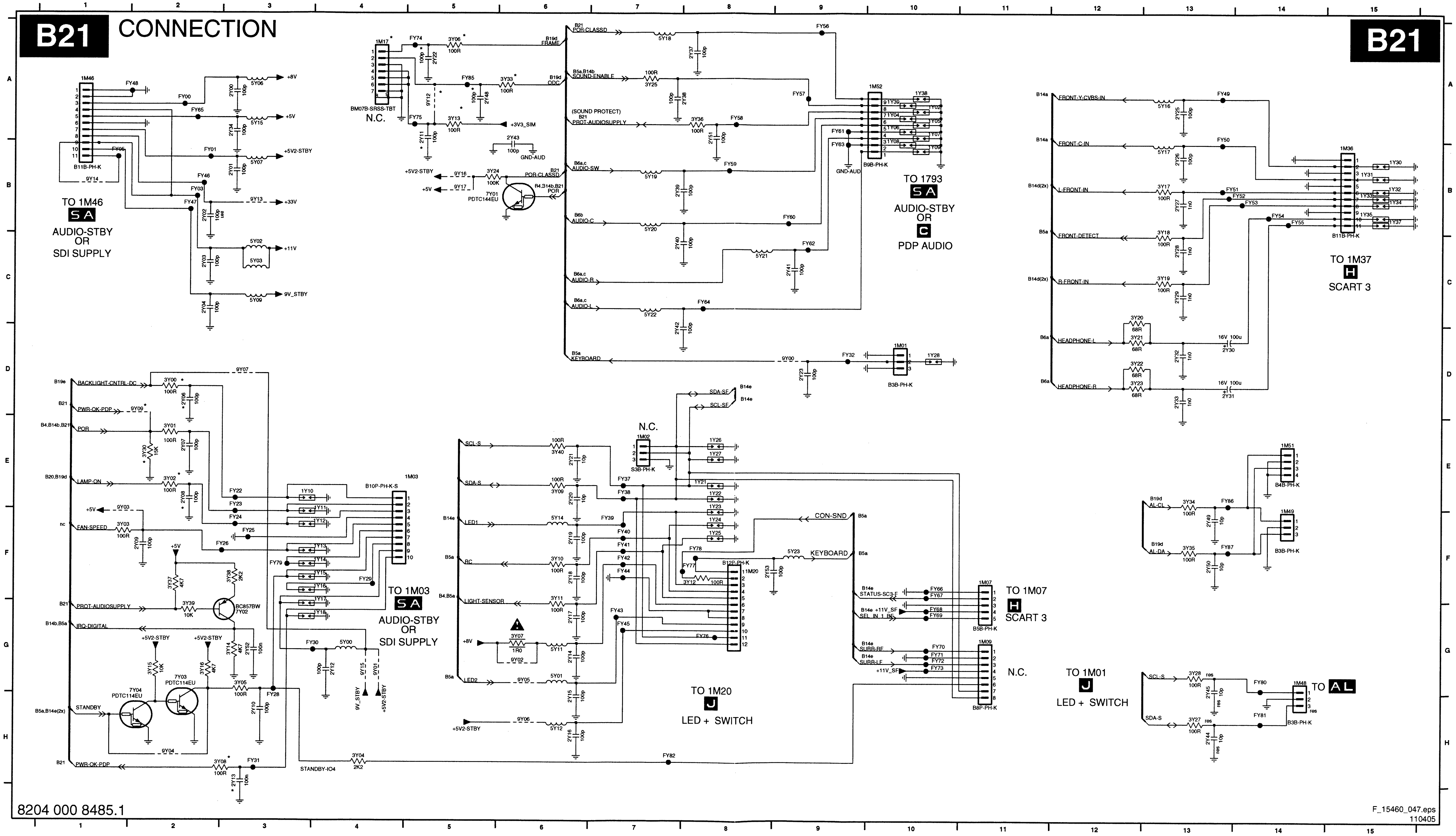
F_15460_046.eps
080405

1G50	C7
2Z44	C2
2Z45	C2
2Z46	C2
2Z47	D2
2Z48	D2
2Z49	D2
2Z50	E2
2Z51	E2
2Z52	E2
2Z53	E2
2Z54	B6
2Z55	B4
2Z56	A5
2Z57	B1
2Z58	A1
2Z59	A2
2Z60	F1
2Z61	F2
2Z62	B1
2Z63	C6
2Z64	C5
2Z65	C5
3Z22	A1
3Z23	A5
3Z24	B2
3Z25	B2
3Z26	A2
3Z28	C6
3Z29	B6
3Z30	B6
3Z31	B5
3Z32	B4
3Z33	B4
3Z34	B1
3Z35	B1
3Z36	A1
3Z37	A1
3Z38	A2
3Z39	B1
3Z50	F1
3Z51	F2
3Z52	B1
3Z53	B1
3Z54	A1
3Z55	A1
3Z56	A5
5Z01	C1
5Z02	C1
5Z03	D1
5Z04	E1
5Z05	E1
5Z06	C6
5Z07	C6
5Z08	D6
6Z00	B6
7Z00	A4
7Z01	B5
FZ02	C2
FZ04	C2
FZ07	C2
FZ08	D2
FZ10	D2
FZ12	D2
FZ14	D2
FZ16	E2
FZ17	E2
FZ18	E2
FZ20	D7
FZ21	C6
FZ40	E3
FZ41	F3
FZ42	F7
FZ43	A2
FZ44	A2
FZ45	B2
FZ46	B2
FZ66	A6
IZ00	B5
IZ01	A5
IZ02	B4
IZ03	A4

SSB: Connection

1M01	D10
1M02	E7
1M03	E5
1M07	F10
1M09	G10
1M17	A4
1M20	F8
1M36	B15
1M46	A1
1M48	G14
1M49	F14
1M51	E14
1M52	A10
1Y02	A10
1Y04	A10
1Y05	A10
1Y06	A10
1Y07	A10
1Y08	A10
1Y09	B10
1Y10	E3
1Y11	E4
1Y12	F4
1Y13	F4
1Y14	F4
1Y15	F4
1Y16	F4
1Y17	F4
1Y18	G4
1Y21	E8
1Y22	E8
1Y23	E8
1Y24	F8
1Y25	F8
1Y26	E8
1Y27	E8
1Y28	D10
1Y30	B15
1Y31	B15
1Y32	B15
1Y33	B15
1Y34	B15
1Y35	B15
1Y37	B15
1Y38	A10
1Y39	A10
2Y00	A3
2Y01	B3
2Y02	B2
2Y03	C3
2Y04	C3
2Y06	D2
2Y07	E2
2Y08	E2
2Y09	F2
2Y10	H3
2Y11	A5
2Y12	G4
2Y13	H3
2Y14	G6
2Y15	H6
2Y16	H6
2Y17	G6
2Y18	F6
2Y19	F6
2Y20	E6
2Y21	E6
2Y22	A5
2Y23	D9
2Y25	A13
2Y26	B13
2Y27	B13
2Y28	C13
2Y29	C13
2Y30	D13
2Y31	D13
2Y32	D13
2Y33	D13
2Y34	A3
2Y37	A8
2Y38	A7
2Y39	B7
2Y40	C7
2Y41	C9
2Y42	D7
2Y43	A6
2Y44	H13
2Y45	G13
2Y48	A5
2Y49	F13
2Y50	F13
2Y51	A8
2Y52	G3
2Y53	F9
3Y00	D2
3Y01	E2
3Y02	E2
3Y03	F1
3Y04	H4
3Y05	G3
3Y06	A5
3Y07	G6
3Y08	H3
3Y09	E6
3Y10	F6
3Y11	F6
3Y12	F8
3Y13	A5
3Y14	G3
3Y15	G2
3Y16	G2
3Y17	B13
3Y18	B13
3Y19	C13
3Y20	C12
3Y21	D12
3Y22	D12
3Y23	D12
3Y24	B5
3Y25	A7
3Y27	H13
3Y28	G13
3Y30	E2
3Y33	A6
3Y34	E13
3Y35	F13
3Y36	A8
3Y37	F2
3Y38	F3
3Y39	G2
3Y40	E6
5Y00	G4
5Y01	G6
5Y02	C3
5Y03	C3
5Y06	A3
5Y07	B3
5Y09	C3
5Y11	G6
5Y12	H6
5Y14	F6
5Y15	A3
5Y16	A13
5Y17	B13
5Y18	A7
5Y19	B7
5Y20	B7
5Y21	C8
5Y22	C7
5Y23	F9
7Y01	B5
7Y02	G3
7Y03	G2
7Y04	H2
9Y00	D9
9Y01	G4
9Y02	G6
9Y03	F1
9Y04	H2
9Y05	G6
9Y06	H6
9Y07	D3
9Y09	D2
9Y12	A5
9Y13	B3
9Y14	B1
9Y15	G4
9Y16	B5
9Y17	B5
FY00	A2
FY01	B2
FY03	B2
FY05	B1
FY22	E3
FY23	E3
FY24	F3
FY25	F3
FY26	F3
FY28	H3
FY29	F4
FY30	G4
FY31	H3
FY32	D9
FY37	E7
FY38	E7
FY39	F7
FY40	F7
FY41	F7
FY42	F7
FY43	G7
FY44	F7
FY45	G7
FY46	B2
FY47	B2
FY48	A2
FY49	A13
FY50	A13
FY51	B13
FY52	B14
FY53	B14
FY54	B14
FY55	B14
FY56	A9
FY57	A9
FY58	A8
FY59	B8
FY60	B9
FY61	C7
FY62	C9
FY63	C8
FY64	C8
FY65	A2
FY66	F10
FY67	F9
FY68	G9
FY69	G9
FY70	G9
FY71	G9
FY72	G9
FY73	G9
FY74	A5
FY75	A5
FY76	G8
FY77	F8
FY78	F8
FY79	F3
FY80	G14
FY81	H14
FY82	H7
FY85	A5
FY86	E13
FY87	F13


B21
CONNECTION
B21
1M46
B11B-PH-K
TO 1M46
SA
AUDIO-STBY
OR
SDI SUPPLY
+8V
+5V
+5V2-STBY
+33V
+11V
9V_STBY
1M17
BM07B-SRSS-TBT
N.C.
+3V3_SIM
GND-AUD
POR-CLASSD
SOUND-ENABLE
(SOUND PROTECT)
PROT-AUDIOSUPPLY
AUDIO-SW
AUDIO-C
AUDIO-R
AUDIO-L
KEYBOARD
PDTC144EU
1M52
B9B-PH-K
TO 1793
SA
AUDIO-STBY
OR
C
PDP AUDIO
1M01
B3B-PH-K
FRONT-Y-CVBS-IN
FRONT-C-IN
L-FRONT-IN
FRONT-DETECT
R-FRONT-IN
HEADPHONE-L
HEADPHONE-R
1M36
B11B-PH-K
TO 1M37
H
SCART 3
BACKLIGHT-CNTRL-DC
PWR-OK-PDP
POR
LAMP-ON
FAN-SPEED
PROT-AUDIOSUPPLY
IRQ-DIGITAL
STANDBY
PWR-OK-PDP
BC857BW
PDTC114EU
1M03
B10P-PH-K-S
TO 1M03
SA
AUDIO-STBY
OR
SDI SUPPLY
STANDBY-IO4
SCL-S
SDA-S
LED1
RC
LIGHT-SENSOR
LED2
N.C.
1M02
S3B-PH-K
SDA-SF
SCL-SF
CON-SND
KEYBOARD
B12P-PH-K
1M20
TO 1M20
J
LED + SWITCH
STATUS-SC3-F
SEL_IN_1_RF
SUBB-RF
SUBB-LF
1M07
B5B-PH-K
TO 1M07
H
SCART 3
1M09
B8P-PH-K
N.C.
TO 1M01
J
LED + SWITCH
1M51
B4B-PH-K
AL-CL
AL-DA
1M49
B3B-PH-K
SCL-S
SDA-S
1M48
B3B-PH-K
TO
AL

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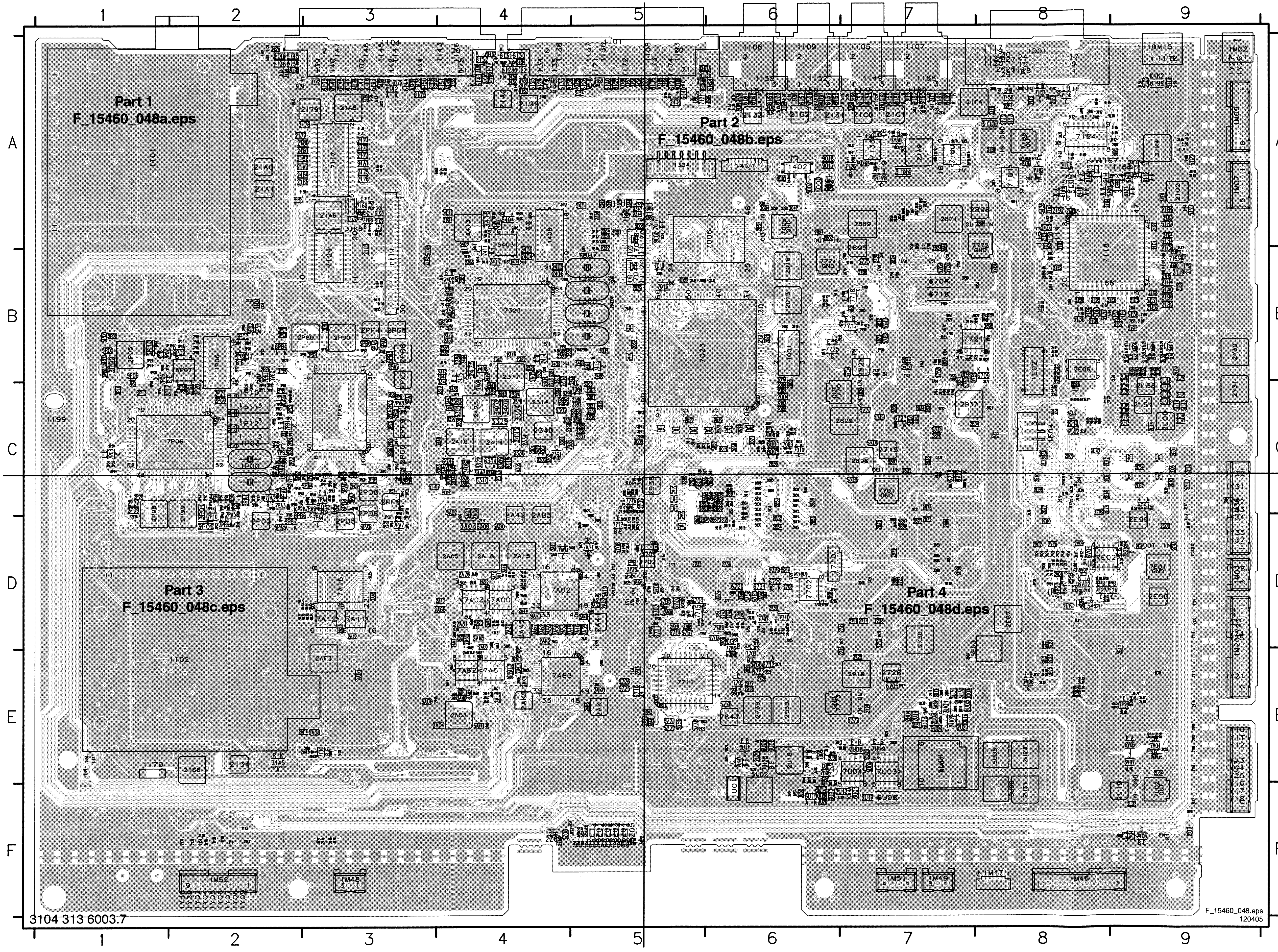
Layout SSB (Top Side Overview)


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
Part 1
F_15460_048a.eps
Part 2
F_15460_048b.eps
Part 3
F_15460_048c.eps
Part 4
F_15460_048d.eps
1T01
1T02
1199
1179
7323
7023
7006
7118
7711
7P16
7P09
7A02
7A63
1M52
1M48
1M51
1M49
1M17
1M46
1M02
1M09
1M07
1001
1106
1109
1105
1107
3104 313 6003.7
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Layout SSB Mapping (Top Side)

1000	A6
1001	B6
1304	A5
1305	B5
1306	B4
1307	B5
1308	B4
1401	A6
1402	A6
1408	A4
1702	D5
1703	D5
1710	D7
1D01	A8
1E02	B8
1E04	C8
1I01	A5
1I04	A4
1I05	A7
1I07	A7
1I09	A6
1I11	B3
1I53	A8
1I56	A9
1I57	A8
1I59	A9
1I79	E1
1M01	D9
1M02	A9
1M03	E9
1M07	A9
1M09	A9
1M15	A9
1M17	F8
1M20	D9
1M36	C9
1M46	F8
1M48	F3
1M49	F7
1M51	F7
1M52	F2
1P00	C2
1P03	C2
1P06	B2
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3V53	E9
3V54	E9
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3Y17	C9
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3Y19	D9
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5309	A5
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9PA3	C2
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9PA8	C2
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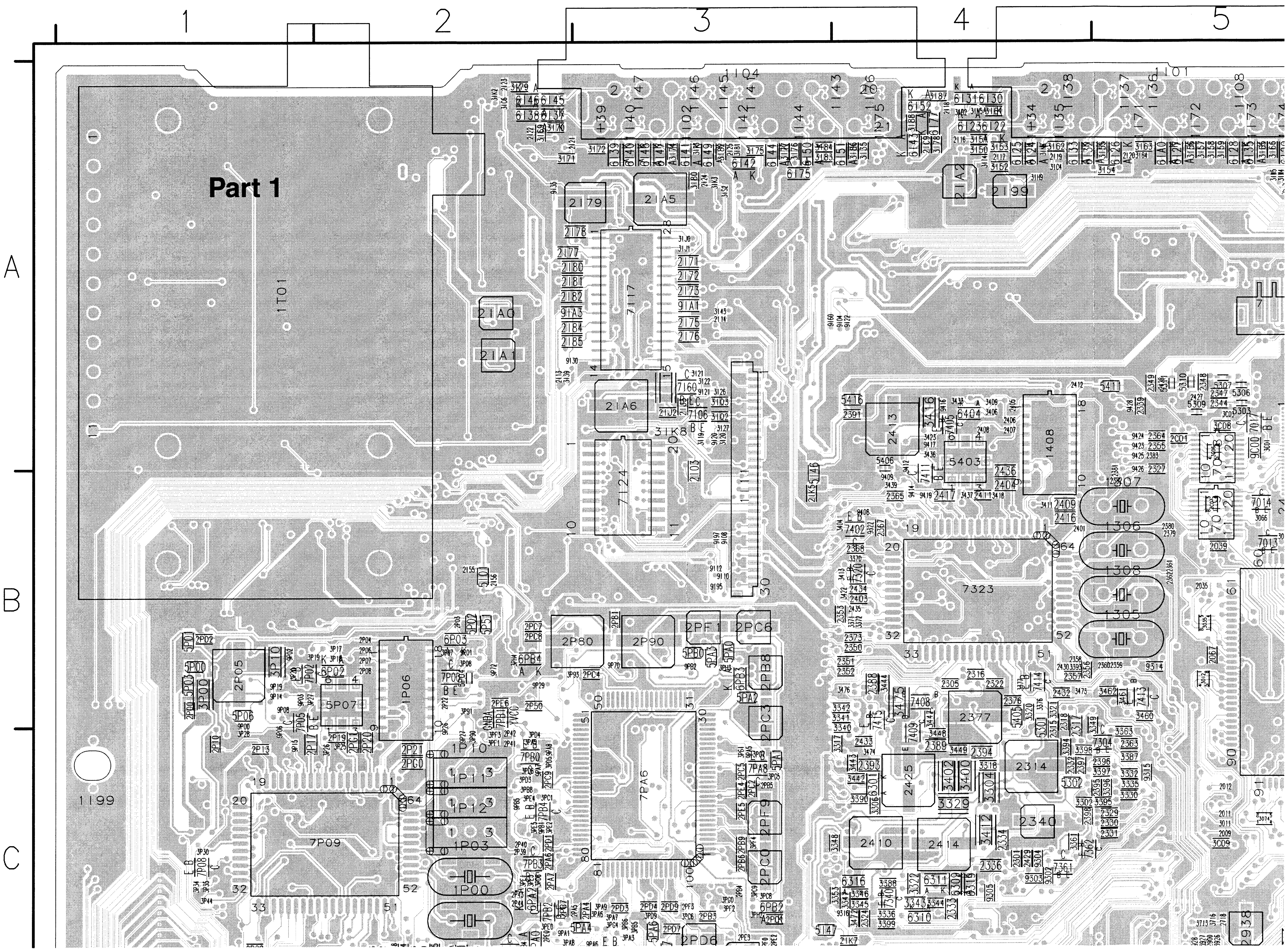
Layout SSB (Top Side Part 1)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21A6
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1308
1305
1307
7323
2P80
2P90
2PF1
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2P05
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1P11
1P12
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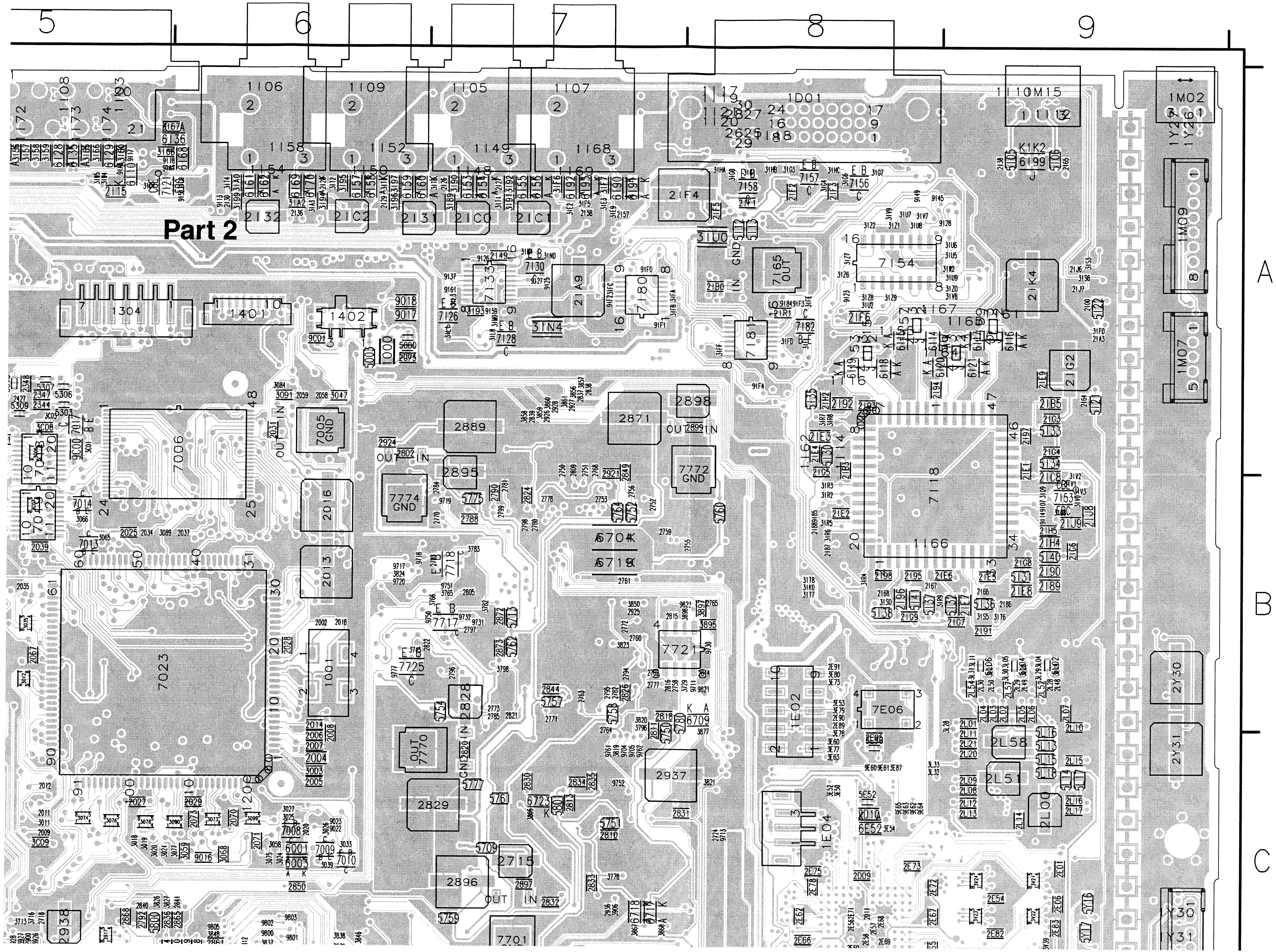
Layout SSB (Top Side Part 2)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21C0
21C1
31U0
7154
21K4
1M09
1M07
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1402
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7131
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7182
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2013
7023
1001
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7725
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7721
1E02
7E06
2Y30
2Y31
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1E04
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2L51
2L00
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1Y30
1Y31
GND
IN
OUT

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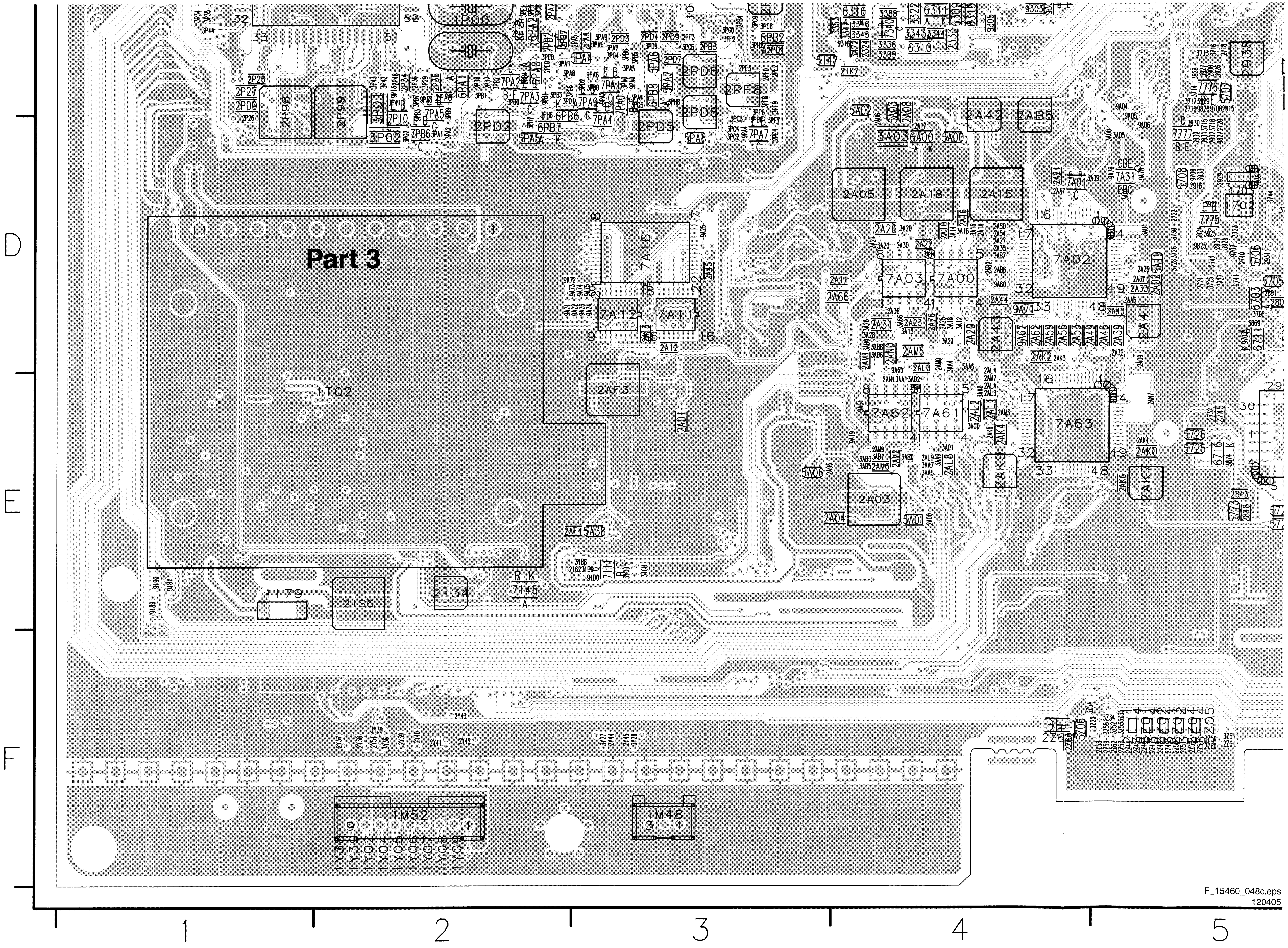
Layout SSB (Top Side Part 3)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E
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2P99
2PD2
2PD5
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2PD8
2PF8
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7A12
7A11
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2A18
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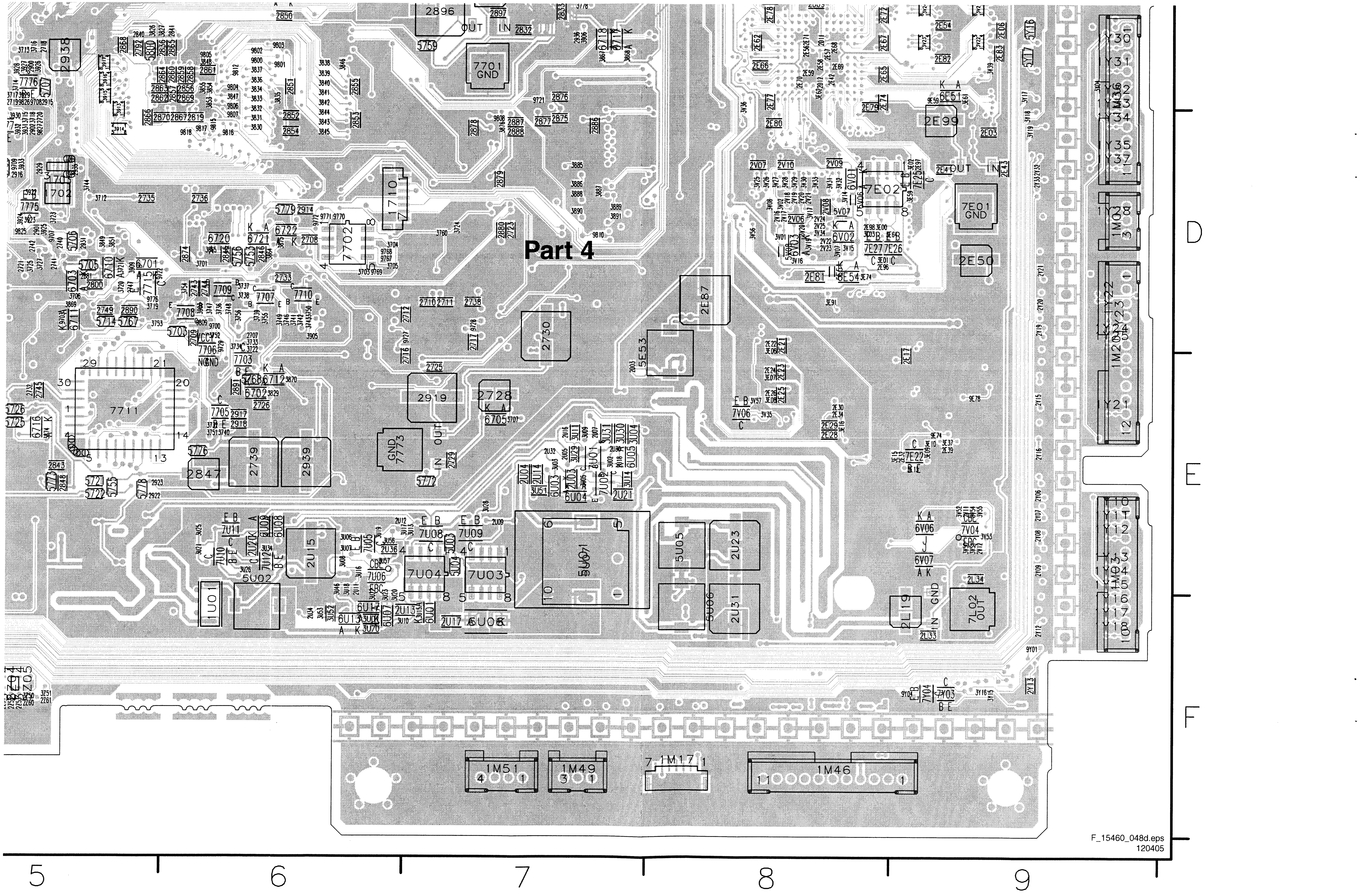
Layout SSB (Top Side Part 4)


Part 4
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E
F
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7
8
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7E01 GND
7E02
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7703
7773 GND
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2939
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2E50
2E99
5E53
5U01
5U02
5U05
5U06
2U15
2U23
2U31
7U04
7U03
7L02 OUT
2L19
1U01
1M51
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1M02
1M03
1M20
1M36
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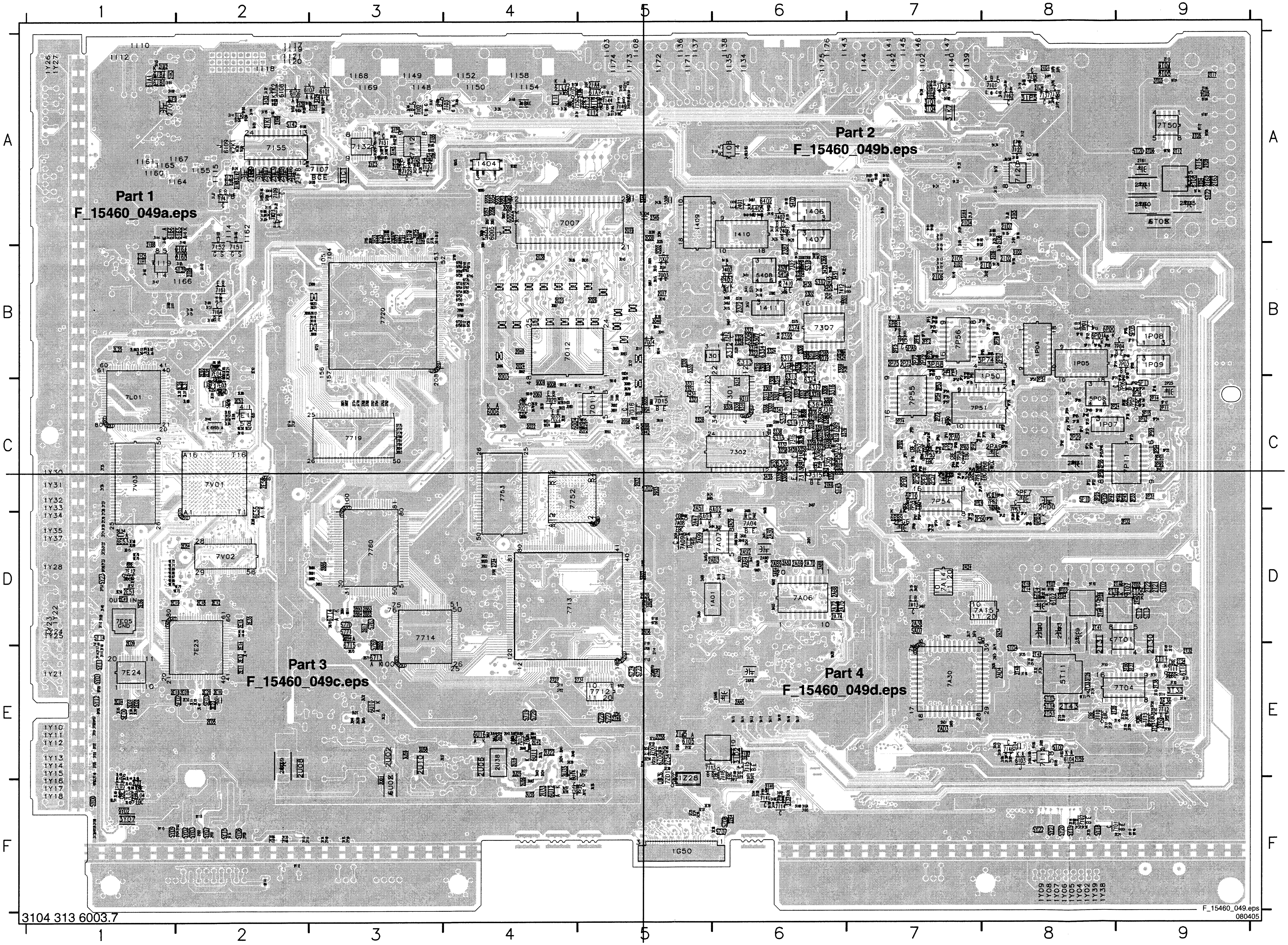
Layout SSB (Overview Bottom Side)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C
D
E
F
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Part 2
F_15460_049b.eps
Part 3
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Part 4
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7E23
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7T04
5T11
1G50
3104 313 6003.7
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Layout SSB Mapping (Bottom Side)

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1407	A6
1409	A5
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1411	B6
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1G50	F5
1P04	B8
1P05	C8
1P07	C8
1P08	B9
1P09	C9
1Z28	E5
2003	B4
2010	C5
2017	B5
2019	A5
2022	C4
2023	B4
2024	B4
2026	B5
2033	B5
2036	B4
2038	B4
2040	B4
2041	B5
2052	A4
2053	A4
2054	A4
2055	A4
2056	A4
2057	A4
2060	A4
2061	A4
2063	C4
2068	C5
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2074	C5
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2303	C6
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2307	C6
2308	C6
2309	B6
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2335	C6
2337	C6
2338	C6
2341	C6
2342	C6
2343	C6
2345	A5
2346	A5
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2A19	D7
2A24	D7
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2E04	E1
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2E18	D2
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2E20	E2
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2E49	D1
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2E53	E2
2E55	C2
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2E86	D1
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2Y27	C1
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2Y29	D1
2Y34	F2
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3E82	B2
3E83	C2
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3IZ4	A2
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3L08	C2
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3PD7	C8
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3PJ1	D8
3PJ2	D8
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3T25	E8
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3T27	E9
3T28	D8
3T29	E9
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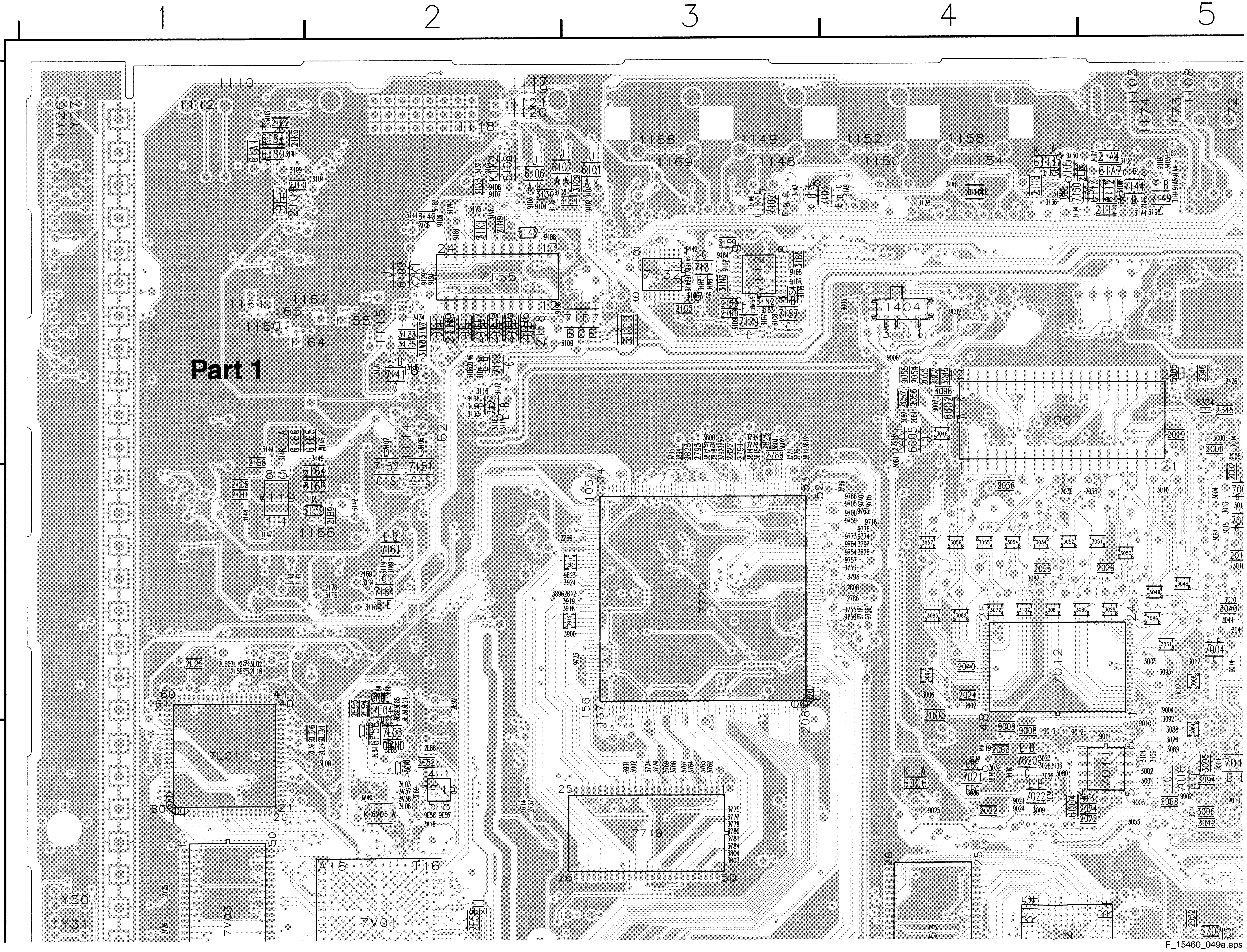
3T31	E9
3T32	E8
3T33	E9
3T51	E9
3T52	E9
3T53	E9
3T54	E9
3T55	E9
3T56	E9
3T57	E9
3T58	E9
3T59	E9
3T60	E9
3U12	F5
3U24	E4
3U27	E5
3U32	E3
3U33	E3
3U35	E4
3U36	F5
3U37	F4
3U38	F4
3U39	E4
3U40	E4
3U41	E4
3U42	E4
3U43	F4
3U44	E3
3U45	E3
3U54	E5
3U55	F4
3U58	E3
3U59	E3
3U60	E4
3U61	E4
3U62	E4
3U63	E4
3U64	E4
3U65	E4
3U66	E4
3U67	E4
3U68	E4
3U69	E4
3V18	C2
3V37	C2
3V38	C2
3V40	C2
3Y00	E1
3Y01	E1
3Y02	E1
3Y03	E1
3Y05	E1
3Y06	F2
3Y07	F1
3Y08	F1
3Y09	D1
3Y10	E1
3Y11	E1
3Y12	D1
3Y13	F2
3Y14	F8
3Y20	D1
3Y21	D1
3Y22	D1
3Y23	D1
3Y24	F9
3Y25	F8
3Y30	F1
3Y33	F2
3Y34	F3
3Y35	F3
3Y37	F8
3Y38	F8
3Y40	D1
3Z23	E5
3Z24	F5
3Z25	F5
3Z26	F5
3Z29	E5
3Z30	E5
3Z31	E5
3Z32	E5
3Z33	E5
3Z36	E5
3Z37	F5
3Z38	F6
3Z39	F5
3Z56	E5
5304	A5
5305	A5
5308	A5
5312	B6
5313	C6
5314	C6
5315	C6
5318	B6
5401	B6
5402	A6
5404	B6
5408	B6
5702	C5
5719	E4
5720	E4
5723	E5
5724	E5
5727	E5
5728	E5
5763	D3
5769	E3
5770	D3
5771	D3
5A07	D7
5E00	E1
5E01	E2
5E02	E2
5E03	E2
5E50	C2
5E54	D1
5E55	C2
5E58	C2
5I02	E8
5I04	E8
5I10	E6
5I39	B2
5I42	A2
5I45	C6
5P05	B9
5P08	C8
5P09	C8
5P10	C8
5P11	C9
5P50	C7
5PA9	B7
5T02	D9
5T03	D8
5T04	E8
5T10	D9
5T11	E8
5T12	D9
5T13	D9
5T14	E8
5T15	E8
5T20	A9
5T22	A9
5T25	A9
5Y00	F1
5Y01	E1
5Y02	F2
5Y03	F2
5Y06	F2
5Y07	F2
5Y09	F1
5Y11	E1
5Y12	E1
5Y14	D1
5Y15	F2
5Y18	F8
5Y19	F8
5Y20	F8
5Y21	F8
5Y22	F8
5Y23	D1
5Z07	F6
5Z08	F6
6002	A4
6004	C4
6005	A4
6006	C4
6303	B6
6304	B6
6306	B6
6307	B6
6308	C6
6312	B6
6313	B6
6314	C6
6317	C6
6334	B6
6402	A6
6403	B6
6405	A6
6713	E3
6714	D3
6715	E3
6A01	C5
6A02	C6
6E53	D1
6E55	D2
6E56	C2
6I01	A3
6I03	E8
6I04	E8
6I05	E5
6I06	A2
6I07	A3
6I08	A2
6I09	A2
6I11	A4
6I12	A5
6I13	A5
6I63	B2
6I64	A2
6I65	A1
6I66	A2
6I80	A1
6I81	A1
6IA1	A1
6IA7	A5
6P00	B8
6P01	B8
6P10	C7
6PB1	B7
6PB5	D8
6PB9	D7
6T01	A9
6T02	D8
6T03	A9
6T04	D8
6T05	A9
6T06	D9
6T07	D9
6T08	A9
6T10	E9
6T11	E9
6U02	E3
6U10	E3
6U11	E4
6U12	F4
6U14	E4
6U16	E4
6V05	C2
6Z00	E5
7002	B5
7003	B5
7004	B5
7007	A5
7011	C5
7012	B4
7015	C5
7016	C5
7020	C4
7021	C4
7022	C4
7301	C6
7302	C6
7303	B6
7305	C6
7306	C6
7307	B6
7309	C6
7310	C6
7312	B6
7313	C6
7314	C6
7315	C6
7316	C6
7317	C6
7318	C6
7319	C6
7322	B6
7375	C6
7401	A6
7403	B6
7406	A6
7407	A6
7410	B6
7412	B7
7712	E5
7713	D4
7714	D3
7719	C3
7720	B3
7752	C4
7753	C4
7760	D3
7A04	D6
7A06	D6
7A07	D6
7A08	D5
7A09	D5
7A13	D7
7A14	D7
7A15	D8
7A30	E8
7E03	B2
7E04	C2
7E05	D1
7E10	C2
7E12	D1
7E23	E2
7E24	E1
7I01	A8
7I02	A3
7I03	A4
7I04	A4
7I05	A5
7I07	A3
7I08	A6
7I09	A2
7I10	E8
7I12	A3
7I13	E5
7I14	F6
7I15	E6
7I16	E6
7I19	B1
7I20	A8
7I22	A8
7I23	A2
7I27	A3
7I29	A3
7I31	A3
7I32	A3
7I35	A8
7I36	A8
7I37	A8
7I38	A7
7I40	F6
7I41	A2
7I44	A5
7I46	E8
7I49	A5
7I50	A5
7I51	B2
7I52	B2
7I55	A2
7I61	B2
7I62	A8
7I64	B2
7L01	B1
7L03	F1
7L04	F1
7L05	E1
7P01	B8
7P03	B9
7P04	B9
7P06	C9
7P07	C9
7P11	C9
7P51	C7
7P52	C7
7P53	C7
7P54	C7
7P55	C7
7P56	B7
7P58	C7
7P59	C7
7P60	C8
7P61	C8
7P62	C8
7P63	D8
7PB5	B7
7T01	D9
7T04	E9
7T10	E8
7T11	E9
7T12	E9
7T13	E9
7T50	A9
7U07	F4
7U13	E4
7V01	C2
7V02	D2
7V03	C1
7Y01	F9
7Y02	F8
7Z00	E5
7Z01	E5
9001	C5
9002	C5
9003	C5
9004	B5
9005	A4
9006	A4
9007	A4
9008	C4
9009	C4
9010	C5
9011	C5
9012	C4
9013	C4
9014	B5
9015	C5
9019	C4
9021	C4
9024	C4
9025	C4
9308	C6
9309	C6
9310	C6
9311	C6
9312	C6
9313	C6
9318	B6
9319	B6
9401	A6
9402	A6
9403	A6
9404	B6
9405	A6
9406	B6
9407	B6
9410	B6
9413	B6
9415	B6
9418	A6
9420	A6
9421	C6
9422	B6
9427	B6
9701	E5
9702	E5
9706	D5
9710	D5
9712	B4
9714	C2
9715	B4
9716	B4
9723	B3
9726	D5
9740	B4
9753	B4
9754	B4
9755	B4
9756	B4
9757	B4
9758	B4
9759	B4
9760	B4
9763	B4
9764	B4
9765	B4
9766	B4
9773	B4
9774	B4
9775	B4
9811	D3
9820	D4
9823	B3
9A00	D6
9A01	D6
9A02	D6
9A03	D6
9A07	D6
9A08	D6
9A10	E6
9A11	E6
9A12	E6
9A13	E6
9A14	E6
9A15	E6
9A16	E6
9A17	E6
9A18	D6
9A20	E6
9C02	A4
9E57	C2
9E58	C2
9E66	D1
9E67	D1
9E68	D1
9E69	D1
9E70	D1
9E71	D1
9E72	D1
9E73	D2
9E75	D1
9E76	D1
9E77	D2
9I00	A7
9I01	A7
9I02	A7
9I03	B7
9I05	E8
9I06	E8
9I09	A7
9I11	A7
9I15	A8
9I16	A8
9I19	B7
9I29	A2
9I31	A7
9I32	A7
9I33	A7
9I34	A8
9I39	A7
9I41	A3
9I42	A3
9I50	A4
9I57	A8
9I58	A8
9I62	A3
9I63	A3
9I64	A3
9I65	A3
9I66	A3
9I67	A3
9I68	A2
9I78	B8
9I79	A3
9I81	A2
9I88	A2
9I91	A2
9I92	A7
9I93	A7
9I94	A7
9I96	B8
9I98	A2
9I99	F6
9IA2	A3
9IA4	A5
9IA5	A5
9IB1	A7
9IB2	A7
9IB3	A2
9ID1	A3
9ID2	A3
9ID3	A2
9ID4	A2
9ID5	A2
9ID6	A2
9ID7	A2
9ID8	A2
9ID9	A2
9L00	F1
9L01	F1
9P04	B8
9P05	B9
9P07	C9
9P09	B9
9P10	B8
9P11	B8
9P12	C9
9P16	B8
9P17	C8
9P18	B9
9P20	C8
9P21	C8
9P22	C9
9P23	C8
9P24	C9
9P25	C9
9P28	C8
9P30	C9
9P31	C7
9P32	C7
9P52	C7
9P53	C7
9P54	D7
9P69	B7
9P71	B7
9P73	D7
9P74	D7
9P75	D7
9PB7	D8
9T01	A9
9T02	D8
9T03	D8
9T04	A9
9T05	A9
9T06	D8
9T07	A9
9T08	A9
9T09	D8
9T10	D8
9T11	E8
9T12	A9
9T14	A9
9T50	A9
9Y00	D1
9Y02	F1
9Y03	F1
9Y05	E1
9Y06	E1
9Y07	E1
9Y09	F1
9Y12	F2
9Y13	F2
9Y14	F2
9Y15	F1
9Y16	F9
9Y17	F9

F_15460_049m.eps
110405

Personal Notes:

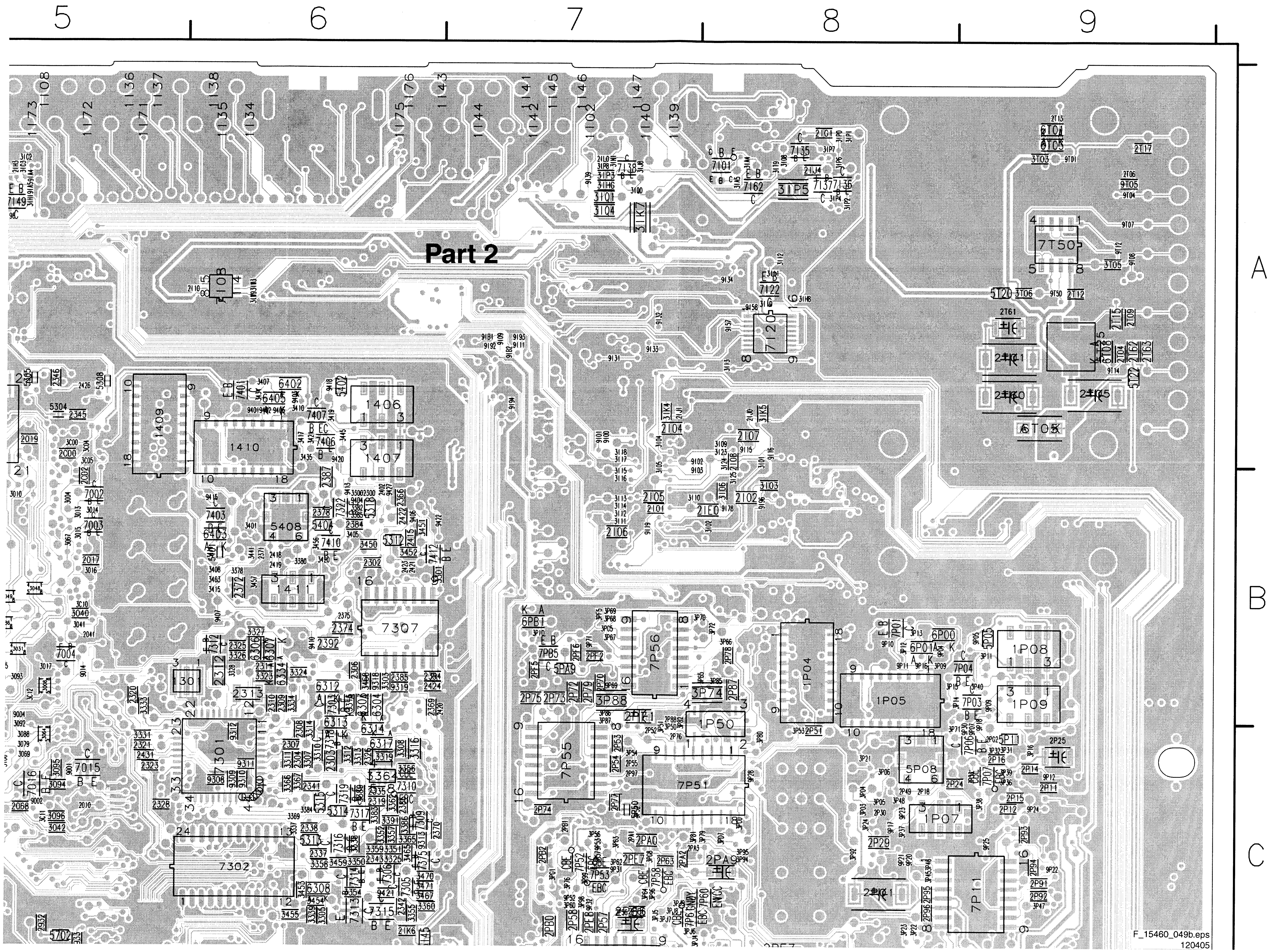
E_06532_012.eps
131004

Layout SSB (Bottom Side Part 1)

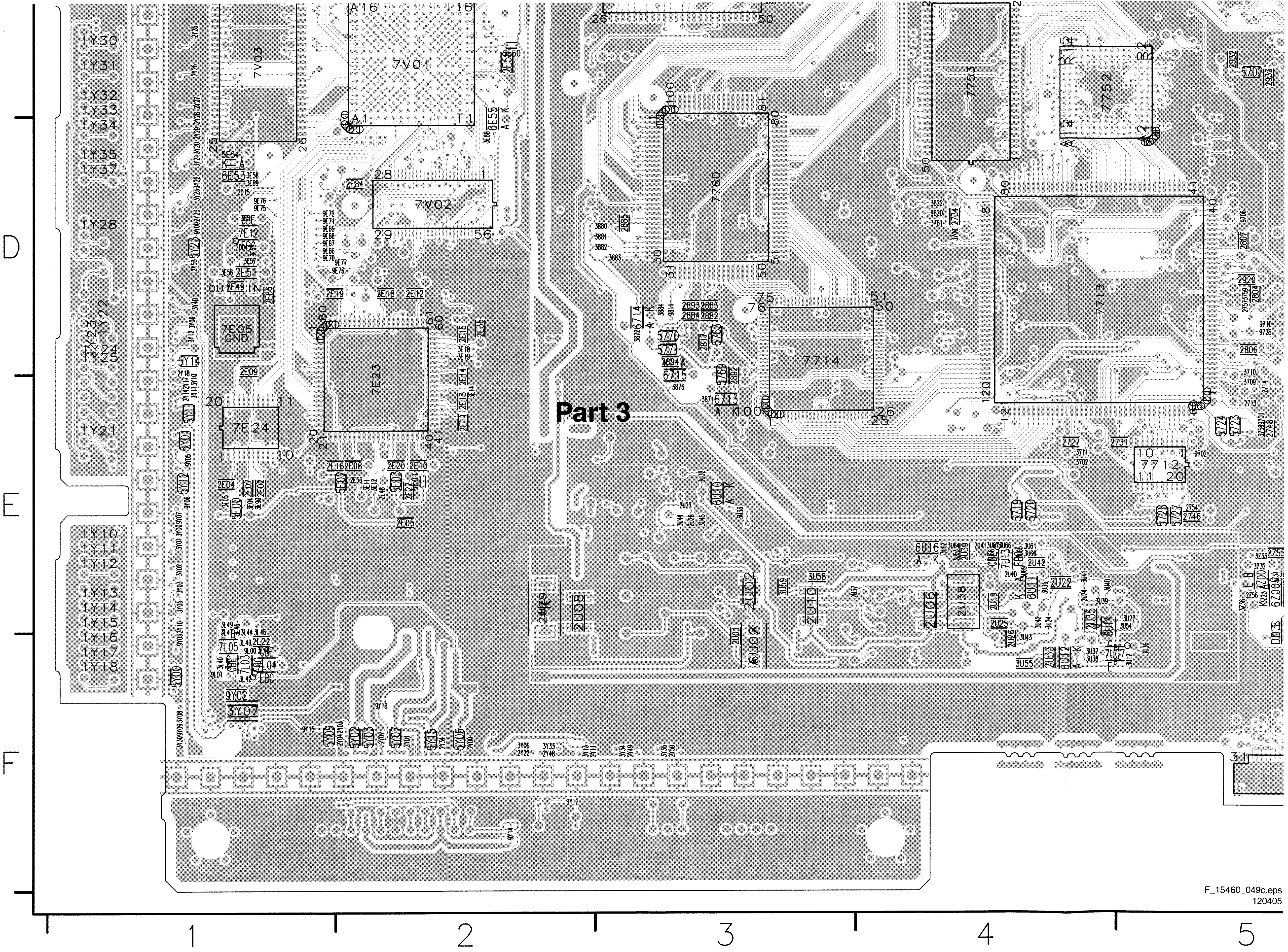

1
2
3
4
5
A
B
C
Part 1
1110
1112
1117
1119
1121
1120
1118
1168
1169
1149
1148
1152
1150
1158
1154
1103
1174
1173
1108
1172
1Y26
1Y27
7155
7132
7131
7112
1404
7107
BCE
1161
1165
1160
1167
1164
1155
1115
1114
1162
7152
7151
7119
1166
7161
7164
7007
7720
7012
7011
7719
7L01
7V03
7V01
A16
T16
1Y30
1Y31
6006
7020
7021
7022
7016
7004
2003
2038
2040
2024
2022
6004
6005
6109
6106
6107
6101
6166
6165
6108
7E1
7E04
7E03
6V05
2L25

F_15460_049a.eps
120405

Layout SSB (Bottom Side Part 2)

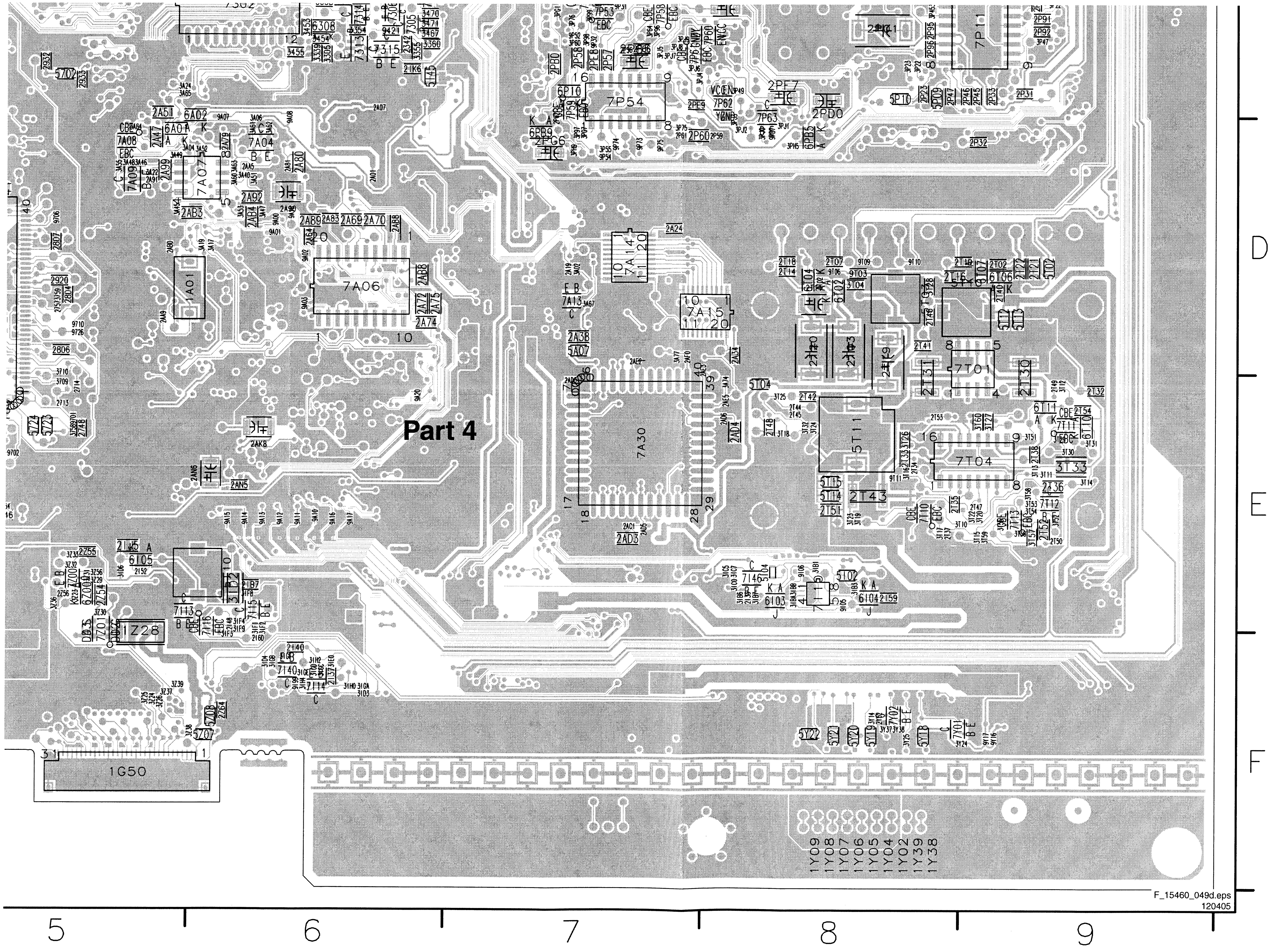

5
6
7
8
9
A
B
C
Part 2
1406
1407
1409
1410
1411
5408
7307
7301
7302
1301
7P56
1P04
1P05
1P08
1P09
1P50
7P55
7P51
5P08
1P07
7P11
7T50
7120
6T05
F_15460_049b.eps
120405

Layout SSB (Bottom Side Part 3)


Part 3
D
E
F
1
2
3
4
5
7V01
7V02
7V03
7E05
GND
7E23
7E24
7760
7714
7713
7712
7753
7752
1Y30
1Y31
1Y32
1Y33
1Y34
1Y35
1Y37
1Y28
1Y22
1Y23
1Y24
1Y25
1Y21
1Y10
1Y11
1Y12
1Y13
1Y14
1Y15
1Y16
1Y17
1Y18
2U06
2U38
2U08
2U02
2U10
3Y07
9Y02

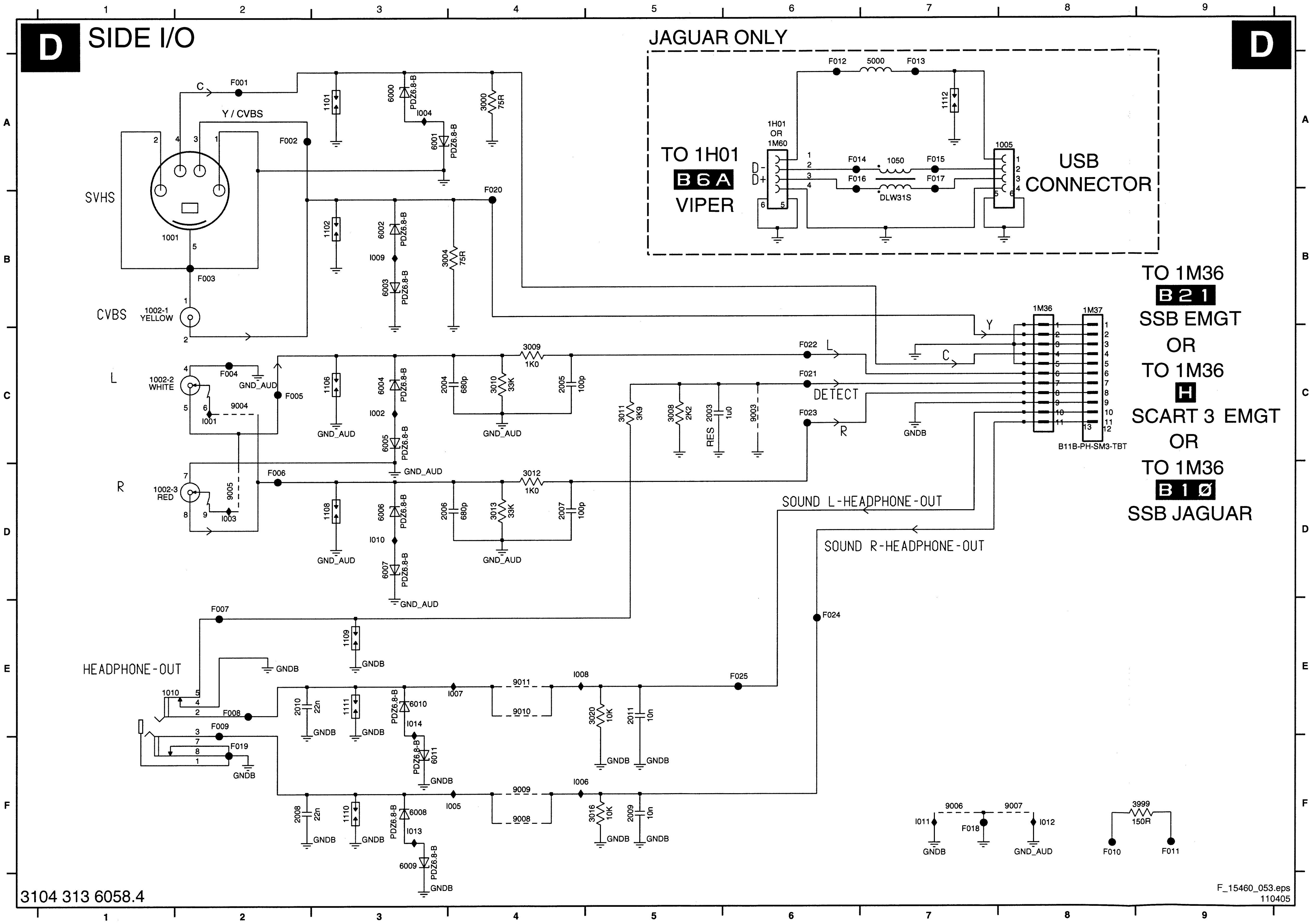
F_15460_049c.eps
120405

Layout SSB (Bottom Side Part 4)


Part 4
D
E
F
5
6
7
8
9
7A06
7A30
7A07
7A01
7P54
7P11
7T01
7T04
5T11
1G50
1Z28
7A14
7A15

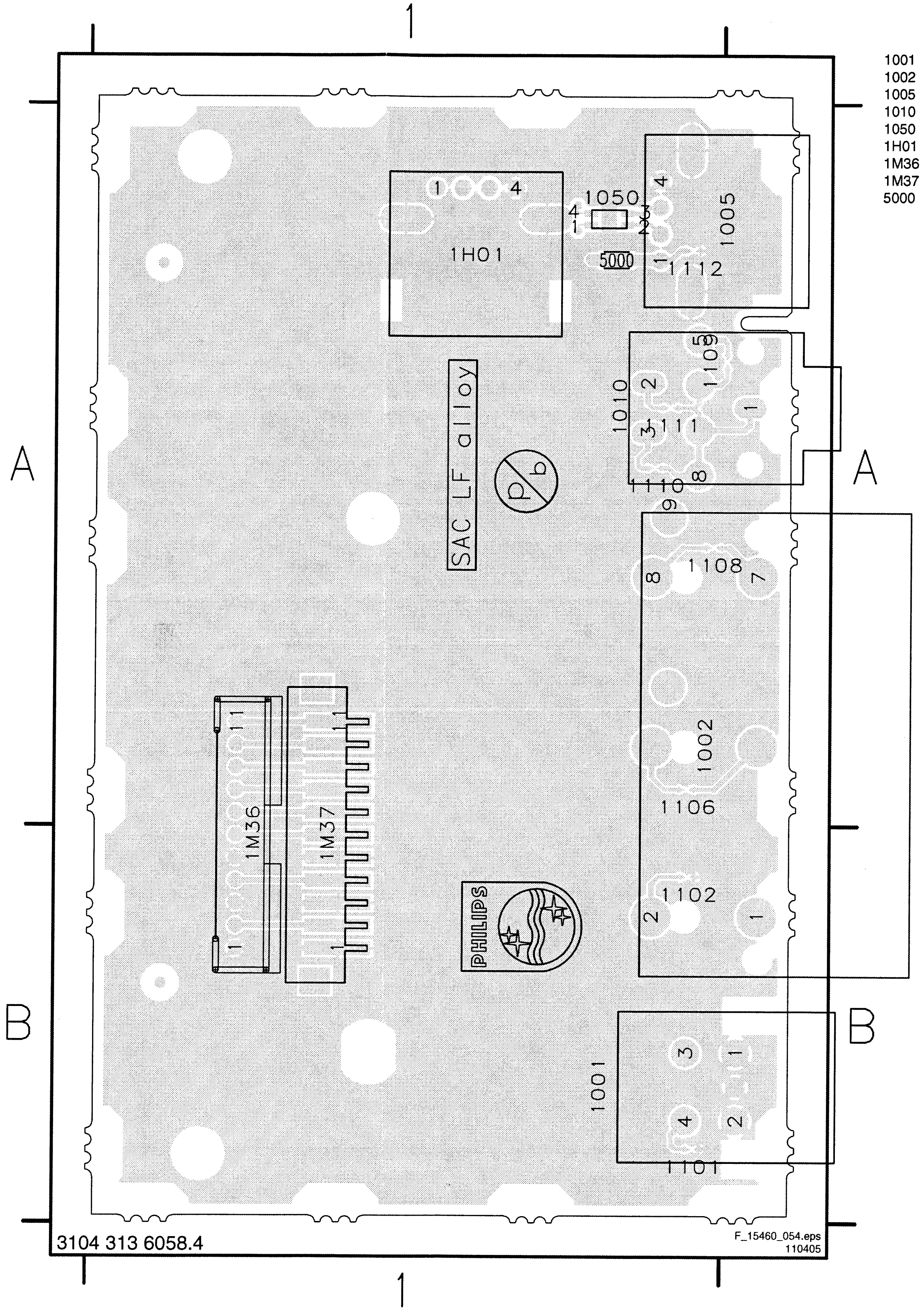
F_15460_049d.eps
120405

Side I/O Panel


D
SIDE I/O
JAGUAR ONLY
SVHS
1001
CVBS
1002-1 YELLOW
C
Y / CVBS
F001
F002
F003
F020
1101
1102
6000
6001
6002
6003
PDZ6.8-B
I004
I009
3000 75R
3004 75R
L
1002-2 WHITE
F004
GND_AUD
F005
9004
I001
1106
6004
6005
I002
2004 680p
3010 33K
3009 1K0
2005 100p
R
1002-3 RED
9005
I003
F006
1108
6006
6007
I010
2006 680p
3013 33K
3012 1K0
2007 100p
F022
F021
F023
DETECT
3011 3K9
3008 2K2
2003 1u0
RES
9003
TO 1H01
B6A
VIPER
1H01 OR 1M60
D-
D+
F012
5000
F013
1112
F014
1050
F015
F016
DLW31S
F017
1005
USB CONNECTOR
1M36
1M37
B11B-PH-SM3-TBT
Y
C
GNDB
TO 1M36
B21
SSB EMGT
OR
TO 1M36
H
SCART 3 EMGT
OR
TO 1M36
B10
SSB JAGUAR
SOUND L-HEADPHONE-OUT
SOUND R-HEADPHONE-OUT
F007
1109
HEADPHONE-OUT
1010
F008
F009
F019
F024
F025
2010 22n
1111
6010
I014
6011
I007
9011
9010
I008
3020 10K
2011 10n
2008 22n
1110
6008
I013
6009
I005
9009
9008
I006
3016 10K
2009 10n
9006
9007
I011
F018
I012
GND_AUD
3999 150R
F010
F011
3104 313 6058.4
F_15460_053.eps
110405

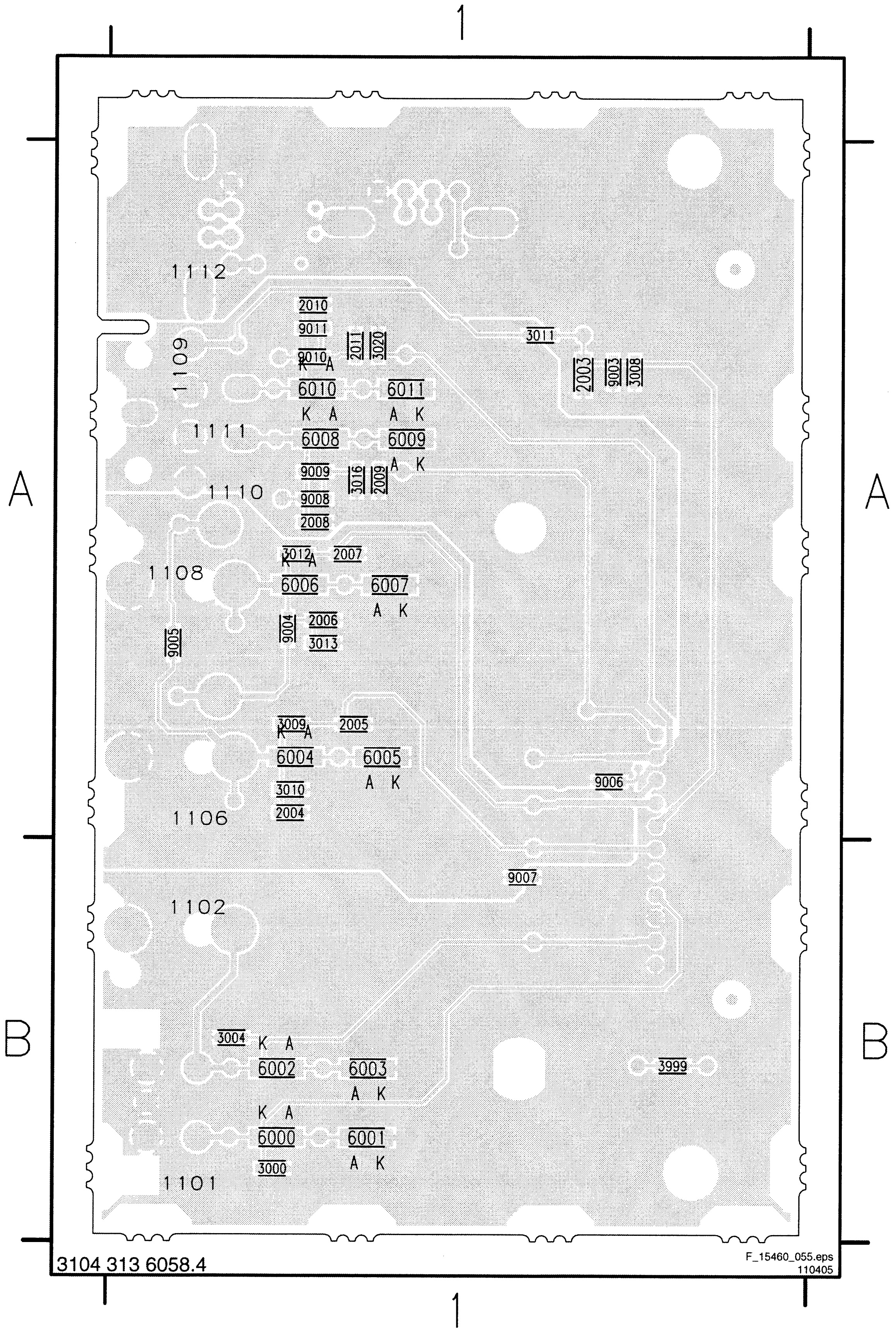
1001	B2	F002	A2
1002-1	B1	F003	B2
1002-2	C1	F004	C2
1002-3	D1	F005	C2
1005	A8	F006	D2
1010	E1	F007	E2
1050	A7	F008	E2
1101	A3	F009	E2
1102	B3	F010	F8
1106	C3	F011	F9
1108	D3	F012	A6
1109	E3	F013	A7
1110	F3	F014	A6
1111	E3	F015	A7
1112	A7	F016	A6
1H01	A6	F017	A7
1M36	B8	F018	F7
1M37	B8	F019	F2
2003	C5	F020	B4
2004	C3	F021	C6
2005	C4	F022	C6
2006	D3	F023	C6
2007	D4	F024	E6
2008	F2	F025	E6
2009	F5	I001	C2
2010	E2	I002	C3
2011	E5	I003	D2
3000	A4	I004	A3
3004	B3	I005	F4
3008	C5	I006	F4
3009	C4	I007	E4
3010	C4	I008	E4
3011	C5	I009	B3
3012	D4	I010	D3
3013	D4	I011	F7
3016	F5	I012	F8
3020	E5	I013	F3
3999	F9	I014	E3
5000	A7		
6000	A3		
6001	A3		
6002	B3		
6003	B3		
6004	C3		
6005	C3		
6006	D3		
6007	D3		
6008	F3		
6009	F3		
6010	E3		
6011	F3		
9003	C6		
9004	C2		
9005	D2		
9006	F7		
9007	F8		
9008	F4		
9009	F4		
9010	E4		
9011	E4		
F001	A2		

Layout Side I/O Panel (Top Side)


1
A
B
1H01
1050
1005
5000
1112
1010
1109
1111
1110
1108
1002
1106
1102
1001
1101
1M36
1M37
SAC LF alloy
Pb
PHILIPS
3104 313 6058.4
F_15460_054.eps
110405

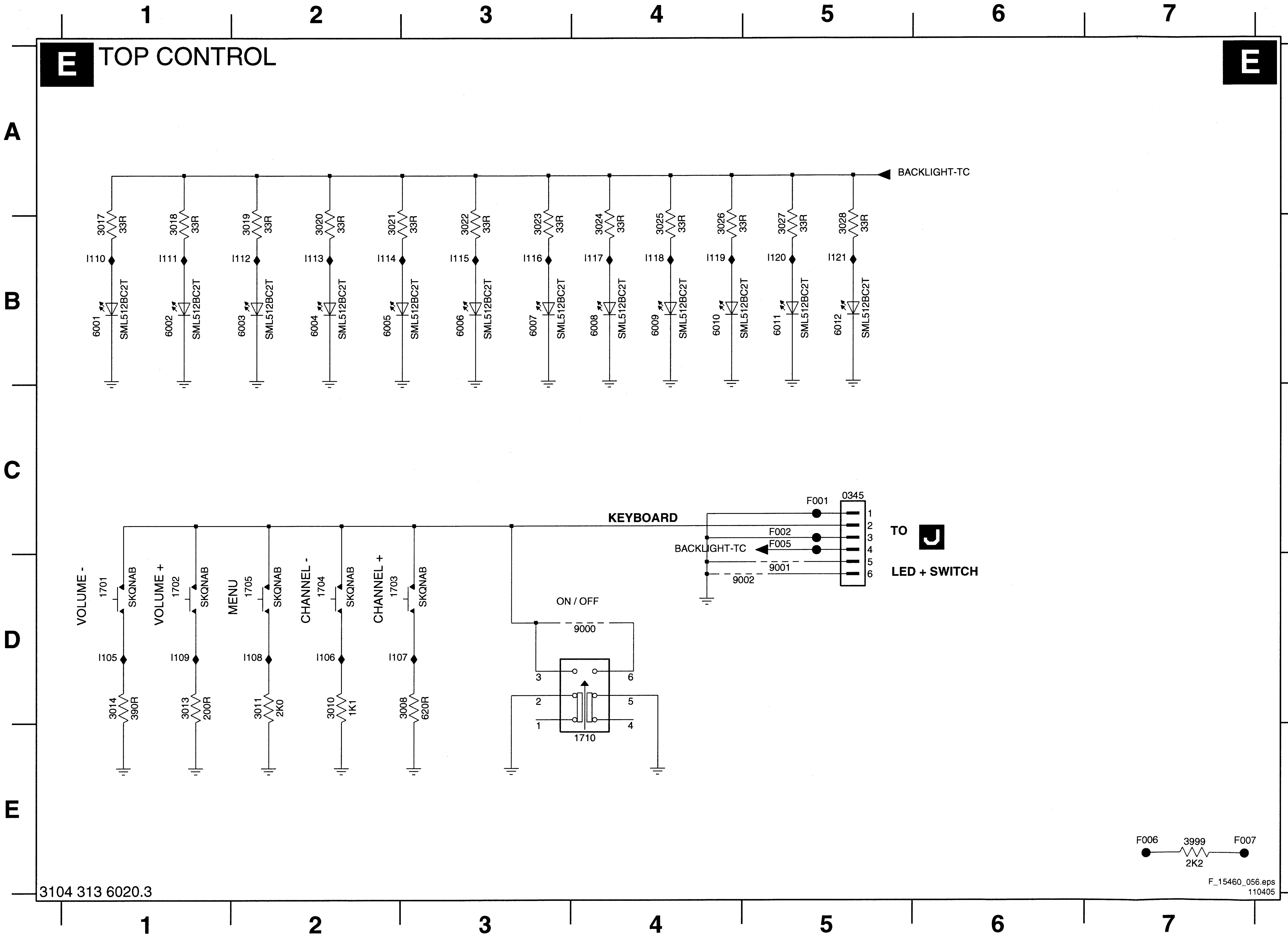
1001	B1
1002	A1
1005	A1
1010	A1
1050	A1
1H01	A1
1M36	B1
1M37	B1
5000	A1

Layout Side I/O Panel (Bottom Side)


1
A
B
1112
1109
1111
1110
1108
1106
1102
1101
2010
9011
9010
2011
3020
6010
6011
6008
6009
9009
9008
2008
3016
2009
3011
2003
9003
3008
3012
2007
6006
6007
9004
2006
3013
9005
3009
2005
6004
6005
3010
2004
9006
9007
3004
6002
6003
6000
6001
3000
3999
K A
3104 313 6058.4
F_15460_055.eps
110405

2003	A1
2004	A1
2005	A1
2006	A1
2007	A1
2008	A1
2009	A1
2010	A1
2011	A1
3000	B1
3004	B1
3008	A1
3009	A1
3010	A1
3011	A1
3012	A1
3013	A1
3016	A1
3020	A1
3999	B1
6000	B1
6001	B1
6002	B1
6003	B1
6004	A1
6005	A1
6006	A1
6007	A1
6008	A1
6009	A1
6010	A1
6011	A1
9003	A1
9004	A1
9005	A1
9006	A1
9007	B1
9008	A1
9009	A1
9010	A1
9011	A1

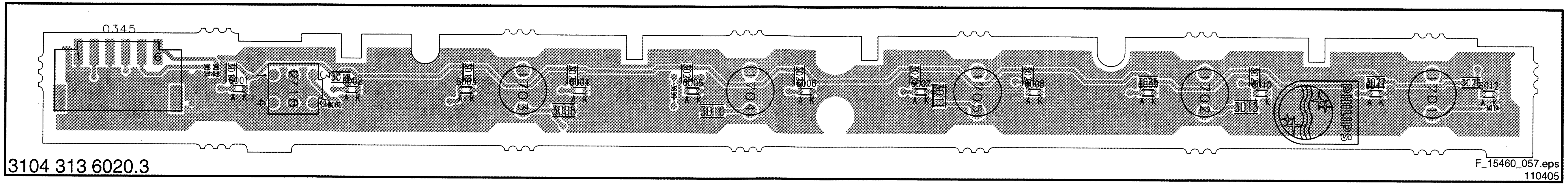
Top Control Panel


E TOP CONTROL
1 2 3 4 5 6 7
A B C D E
BACKLIGHT-TC
3017 33R
3018 33R
3019 33R
3020 33R
3021 33R
3022 33R
3023 33R
3024 33R
3025 33R
3026 33R
3027 33R
3028 33R
I110 I111 I112 I113 I114 I115 I116 I117 I118 I119 I120 I121
6001 SML512BC2T
6002 SML512BC2T
6003 SML512BC2T
6004 SML512BC2T
6005 SML512BC2T
6006 SML512BC2T
6007 SML512BC2T
6008 SML512BC2T
6009 SML512BC2T
6010 SML512BC2T
6011 SML512BC2T
6012 SML512BC2T
KEYBOARD
F001
0345
1 2 3 4 5 6
F002
F005
BACKLIGHT-TC
9001
9002
TO J
LED + SWITCH
VOLUME - 1701 SKQNAB
VOLUME + 1702 SKQNAB
MENU 1705 SKQNAB
CHANNEL - 1704 SKQNAB
CHANNEL + 1703 SKQNAB
ON / OFF
9000
I105 I109 I108 I106 I107
3014 390R
3013 200R
3011 2K0
3010 1K1
3008 620R
3 6 2 5 1 4
1710
F006 3999 F007
2K2
3104 313 6020.3
F_15460_056.eps
110405

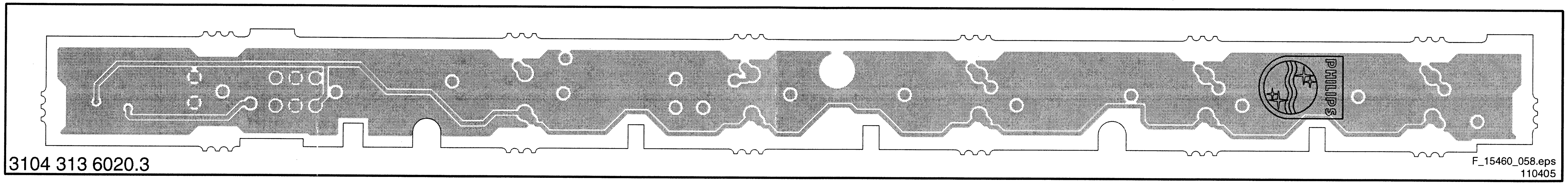
0345	C5
1701	D1
1702	D1
1703	D2
1704	D2
1705	D2
1710	E4
3008	D3
3010	D2
3011	D2
3013	D1
3014	D1
3017	B1
3018	B1
3019	B2
3020	B2
3021	B2
3022	B3
3023	B3
3024	B4
3025	B4
3026	B4
3027	B5
3028	B5
3999	E7
6001	B1
6002	B1
6003	B2
6004	B2
6005	B2
6006	B3
6007	B3
6008	B4
6009	B4
6010	B4
6011	B5
6012	B5
9000	D4
9001	D5
9002	D5
F001	C5
F002	C5
F005	C5
F006	E7
F007	E7
I105	D1
I106	D2
I107	D2
I108	D2
I109	D1
I110	B1
I111	B1
I112	B2
I113	B2
I114	B2
I115	B3
I116	B3
I117	B4
I118	B4
I119	B4
I120	B5
I121	B5

Layout Top Control Panel (Top Side)

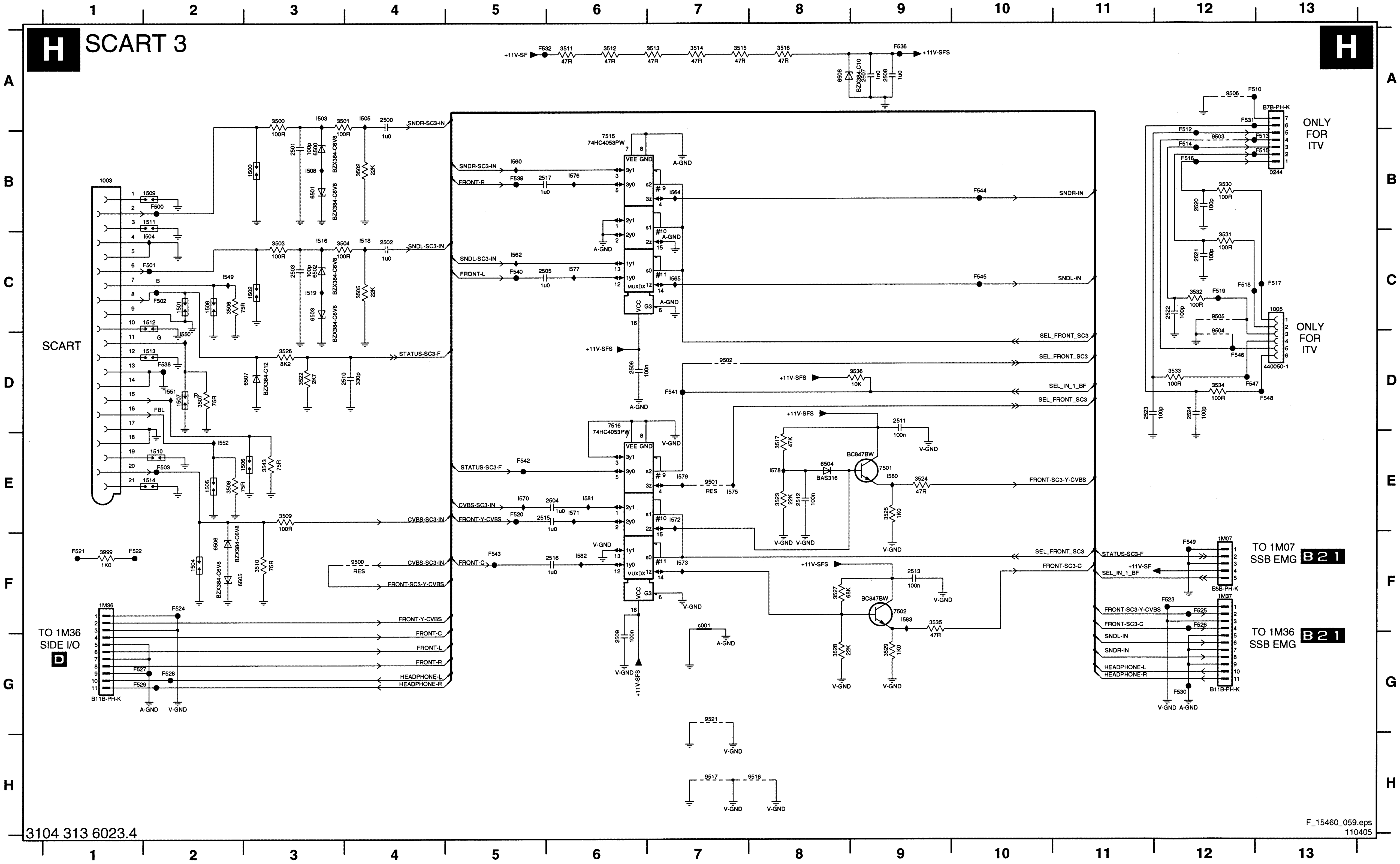
0345	--
1701	--
1702	--
1703	--
1704	--
1705	--
1710	--
3008	--
3010	--
3011	--
3013	--
3014	--
3017	--
3018	--
3019	--
3020	--
3021	--
3022	--
3023	--
3024	--
3025	--
3026	--
3027	--
3028	--
3999	--
6001	--
6002	--
6003	--
6004	--
6005	--
6006	--
6007	--
6008	--
6009	--
6010	--
6011	--
6012	--
9000	--
9001	--
9002	--


0345
1
6
1710
4
6001
6002
6003
1703
3008
6004
6005
3010
1704
6006
6007
3011
1705
6008
3025
1702
3013
6010
PHILIPS
3027
1701
3028
6012
A K
3104 313 6020.3
F_15460_057.eps
110405

Layout Top Control Panel (Bottom Side)


PHILIPS
3104 313 6020.3
F_15460_058.eps
110405

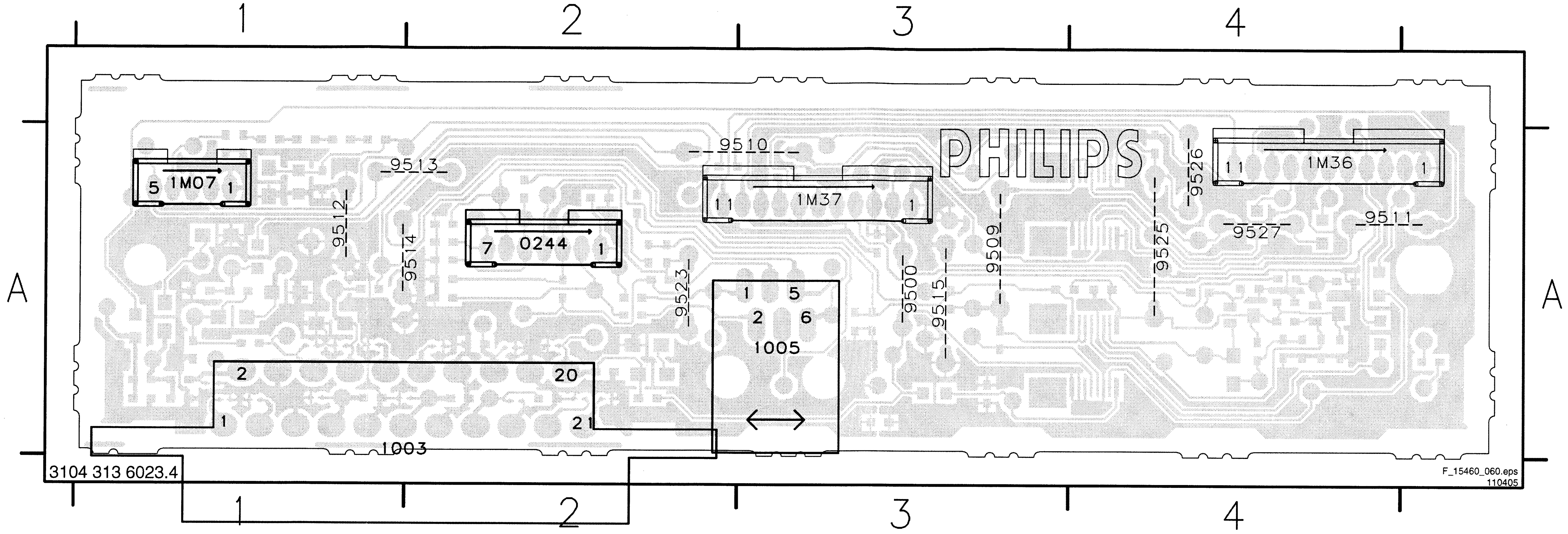
SCART 3 Panel


H
SCART 3
SCART
1003
7515
74HC4053PW
7516
74HC4053PW
BC847BW
7501
7502
SNDR-SC3-IN
SNDL-SC3-IN
STATUS-SC3-F
CVBS-SC3-IN
FRONT-SC3-Y-CVBS
FRONT-Y-CVBS
FRONT-C
FRONT-L
FRONT-R
HEADPHONE-L
HEADPHONE-R
SNDR-IN
SNDL-IN
SEL_FRONT_SC3
SEL_IN_1_BF
FRONT-SC3-C
+11V-SF
+11V-SFS
A-GND
V-GND
ONLY FOR ITV
ONLY FOR ITV
TO 1M36 SIDE I/O
D
TO 1M07 SSB EMG
B21
TO 1M36 SSB EMG
B21
1M36
1M07
1M37
B11B-PH-K
B5B-PH-K
B7B-PH-K
440050-1
3104 313 6023.4
F_15460_059.eps
110405

0244 B13
1003 B1
1005 C13
1500 B3
1501 C2
1502 C3
1504 F2
1505 E2
1506 E3
1507 D2
1508 C2
1509 B2
1510 E2
1511 B2
1512 C2
1513 D2
1514 E2
1M07 F12
1M36 F1
1M37 F12
2500 A4
2501 B3
2502 C4
2503 C3
2504 E6
2505 C5
2506 D6
2507 A9
2508 A9
2509 G6
2510 D4
2511 D9
2512 E8
2513 F9
2515 E5
2516 F6
2517 B5
2520 B12
2521 C12
2522 C12
2523 D11
2524 D12
3500 A3
3501 A3
3502 B4
3503 C3
3504 C3
3505 C4
3506 C2
3507 D2
3508 E2
3509 E3
3510 F3
3511 A6
3512 A6
3513 A7
3514 A7
3515 A7
3516 A8
3517 E8
3522 D3
3523 E8
3524 E9
3525 E9
3526 D3
3527 F8
3528 G8
3529 G9
3530 B12
3531 C12
3532 C12
3533 D12
3534 D12
3535 F9
3536 D9
3543 E3
3999 F1
6500 B3
6501 B3
6502 C3
6503 C3
6504 E8
6505 F2
6506 F2
6507 D2
6508 A8
7501 E9
7502 F9
7515 B6
7516 D6
9500 F4
9501 E7
9502 D7
9503 B12
9504 D12
9505 C12
9506 A12
9516 H8
9517 H7
9521 G7
F500 B2
F501 C2
F502 C2
F503 E2
F510 A12
F512 B12
F513 B13
F514 B12
F515 B13
F516 B12
F517 C13
F518 C12
F519 C12
F520 E5
F521 F1
F522 F1
F523 F12
F524 F2
F525 F12
F526 F12
F527 G1
F528 G2
F529 G1
F530 G12
F531 A12
F532 A5
F536 A9
F538 D2
F539 B5
F540 C5
F541 D7
F542 E5
F543 F5
F544 B10
F545 C10
F546 D12
F547 D12
F548 D13
F549 F12
I503 A3
I504 C2
I505 A4
I508 B3
I516 C3
I518 C4
I519 C3
I549 C2
I550 D2
I551 D2
I552 E2
I560 B5
I562 C5
I564 B7
I565 C7
I570 E5
I571 E6
I572 E7
I573 F7
I575 E7
I576 B6
I577 C6
I578 E8
I579 E7
I580 E9
I581 E6
I582 F6
I583 F9
c001 F7

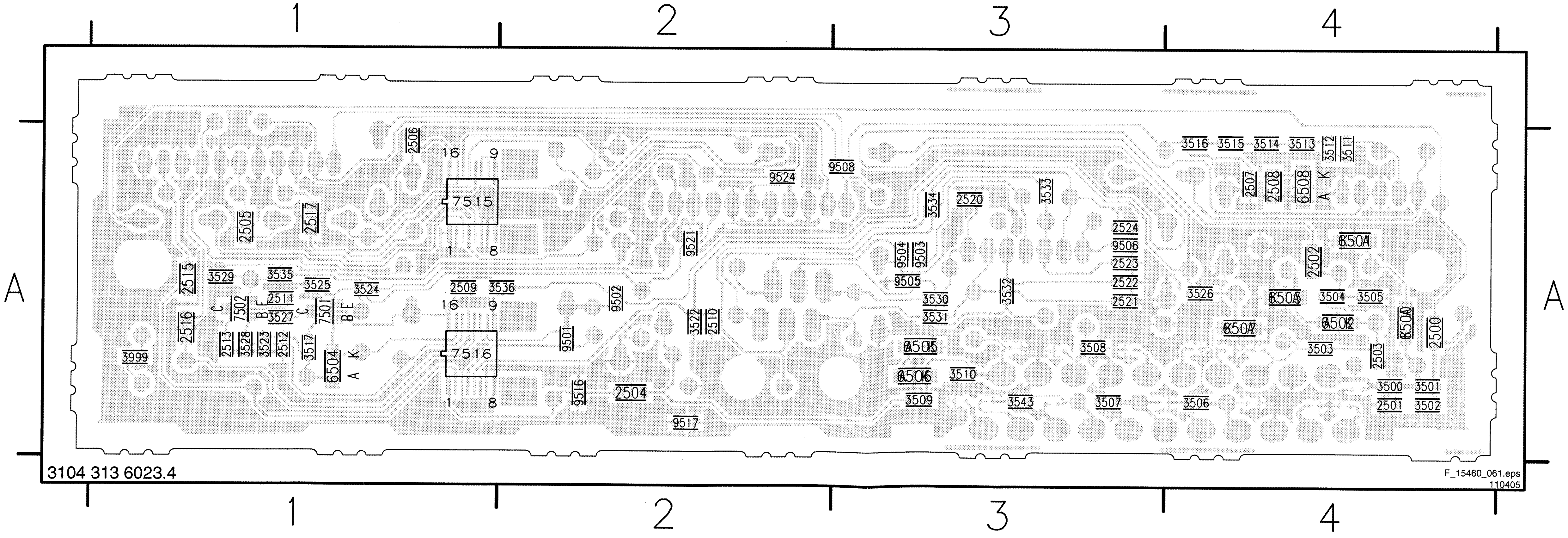
Layout SCART 3 Panel (Top Side)

0244	A2
1003	A1
1005	A3
1M07	A1
1M36	A4
1M37	A3
9500	A3
9509	A3
9510	A3
9511	A4
9512	A1
9513	A2
9514	A1
9515	A3
9523	A2
9525	A4
9526	A4
9527	A4

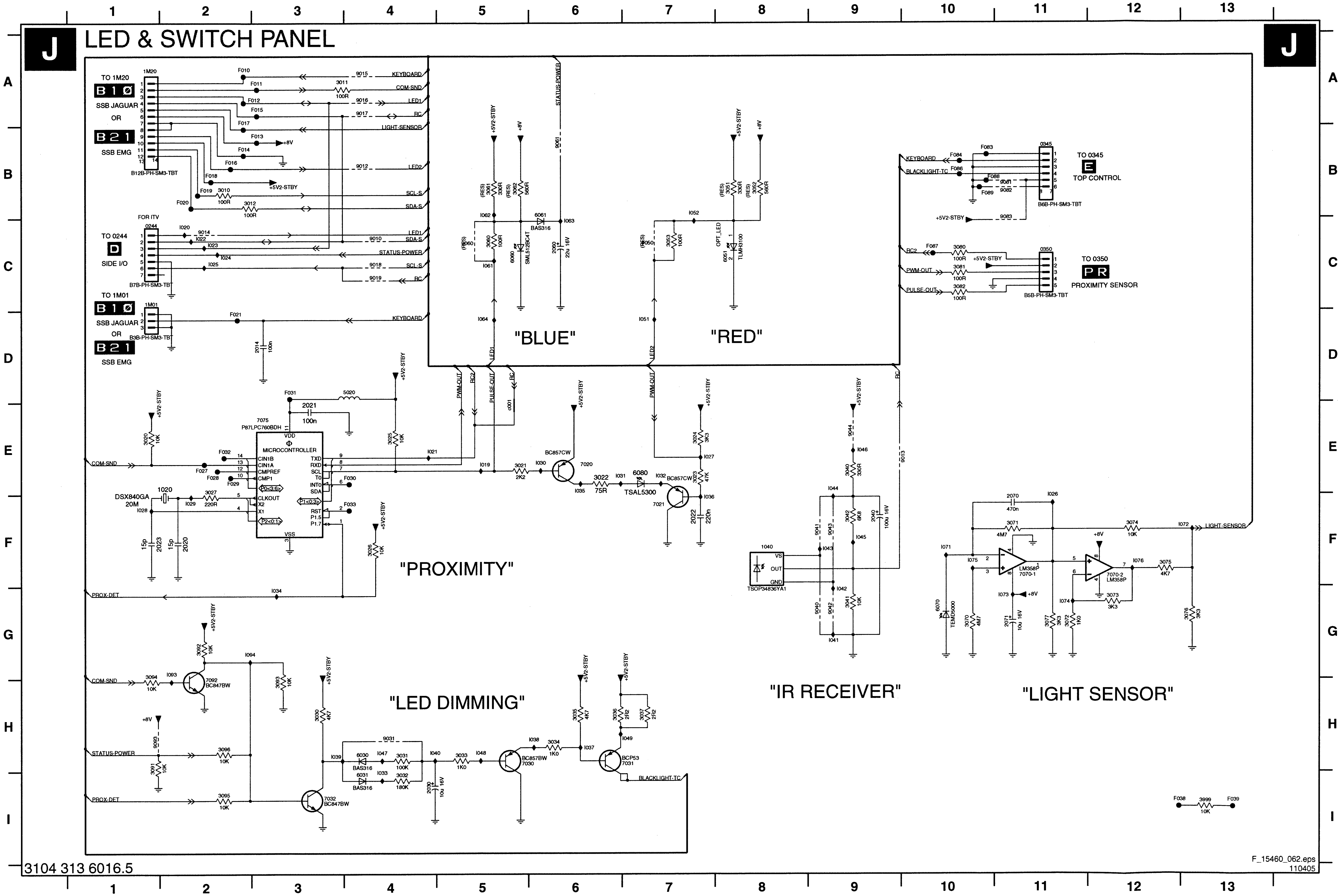

1
2
3
4
A
1M07
0244
1M37
1M36
PHILIPS
9510
9513
9512
9514
9523
9500
9515
9509
9525
9526
9527
9511
1005
1
5
2
6
1003
2
20
1
21
3104 313 6023.4
F_15460_060.eps
110405

Layout SCART 3 Panel (Bottom Side)

2500	A4
2501	A4
2502	A4
2503	A4
2504	A2
2505	A1
2506	A1
2507	A4
2508	A4
2509	A1
2510	A2
2511	A1
2512	A1
2513	A1
2515	A1
2516	A1
2517	A1
2520	A3
2521	A3
2522	A3
2523	A3
2524	A3
3500	A4
3501	A4
3502	A4
3503	A4
3504	A4
3505	A4
3506	A4
3507	A3
3508	A3
3509	A3
3510	A3
3511	A4
3512	A4
3513	A4
3514	A4
3515	A4
3516	A4
3517	A1
3522	A2
3523	A1
3524	A1
3525	A1
3526	A4
3527	A1
3528	A1
3529	A1
3530	A3
3531	A3
3532	A3
3533	A3
3534	A3
3535	A1
3536	A2
3543	A3
3999	A1
6500	A4
6501	A4
6502	A4
6503	A4
6504	A1
6505	A3
6506	A3
6507	A4
6508	A4
7501	A1
7502	A1
7515	A2
7516	A2
9501	A2
9502	A2
9503	A3
9504	A3
9505	A3
9506	A3
9508	A3
9516	A2
9517	A2
9521	A2
9524	A2

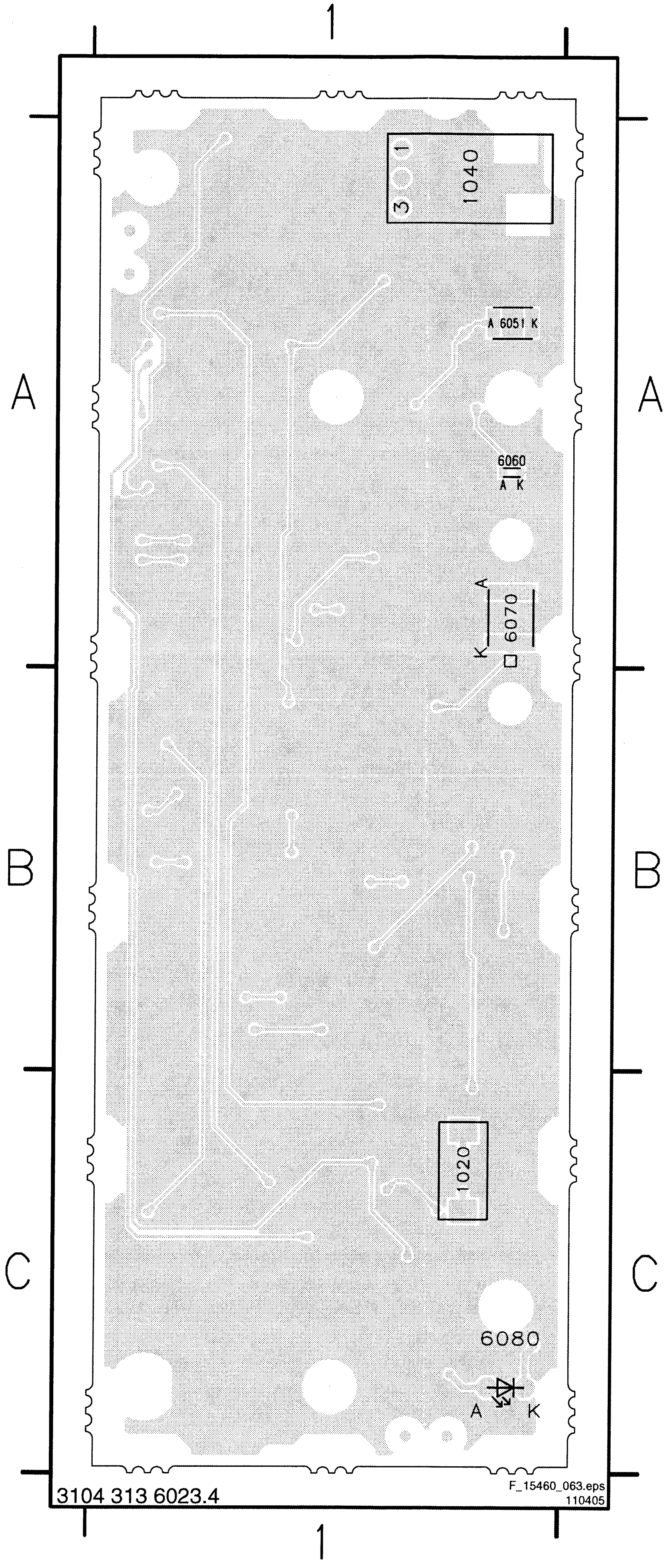

1
2
3
4
A
7515
7516
16
9
1
8
2506
2505
2517
2515
2516
3999
3529
3535
3525
3524
2511
3527
7502
7501
2513
3528
3523
2512
3517
6504
2509
3536
9524
9508
9521
9502
9501
9516
2504
9517
3522
2510
3534
2520
3533
9504
9503
9505
3530
3531
3532
6505
6506
3510
3509
3543
3508
3507
3506
2524
9506
2523
2522
2521
3526
3516
3515
3514
3513
3512
3511
2507
2508
6508
6503
2502
6500
3504
3505
6507
6502
6501
2500
3503
2503
3500
3501
2501
3502
3104 313 6023.4
F_15460_061.eps
110405

LED and Switch Panel


J
LED & SWITCH PANEL
TO 1M20
B10
SSB JAGUAR
OR
B21
SSB EMG
1M20
B12B-PH-SM3-TBT
KEYBOARD
COM-SND
LED1
RC
LIGHT-SENSOR
LED2
SCL-S
SDA-S
+8V
+5V2-STBY
FOR ITV
TO 0244
D
SIDE I/O
0244
B7B-PH-SM3-TBT
STATUS-POWER
TO 1M01
1M01
B3B-PH-SM3-TBT
STATUS-POWER
"BLUE"
"RED"
BAS316
SML512BC4T
OPT_LED
TLMH3100
TO 0345
E
TOP CONTROL
B6B-PH-SM3-TBT
BLACKLIGHT-TC
TO 0350
PR
PROXIMITY SENSOR
B5B-PH-SM3-TBT
PWM-OUT
PULSE-OUT
7075
P87LPC760BDH
MICROCONTROLLER
DSX840GA
20M
1020
5020
2021
100n
BC857CW
7020
6080
TSAL5300
7021
"PROXIMITY"
PROX-DET
"IR RECEIVER"
1040
TSOP34836YA1
"LIGHT SENSOR"
LM358P
7070-1
7070-2
TEMD5000
"LED DIMMING"
7092
BC847BW
7032
BC847BW
7030
BC857BW
7031
BCP53
BLACKLIGHT-TC
3104 313 6016.5
F_15460_062.eps
110405

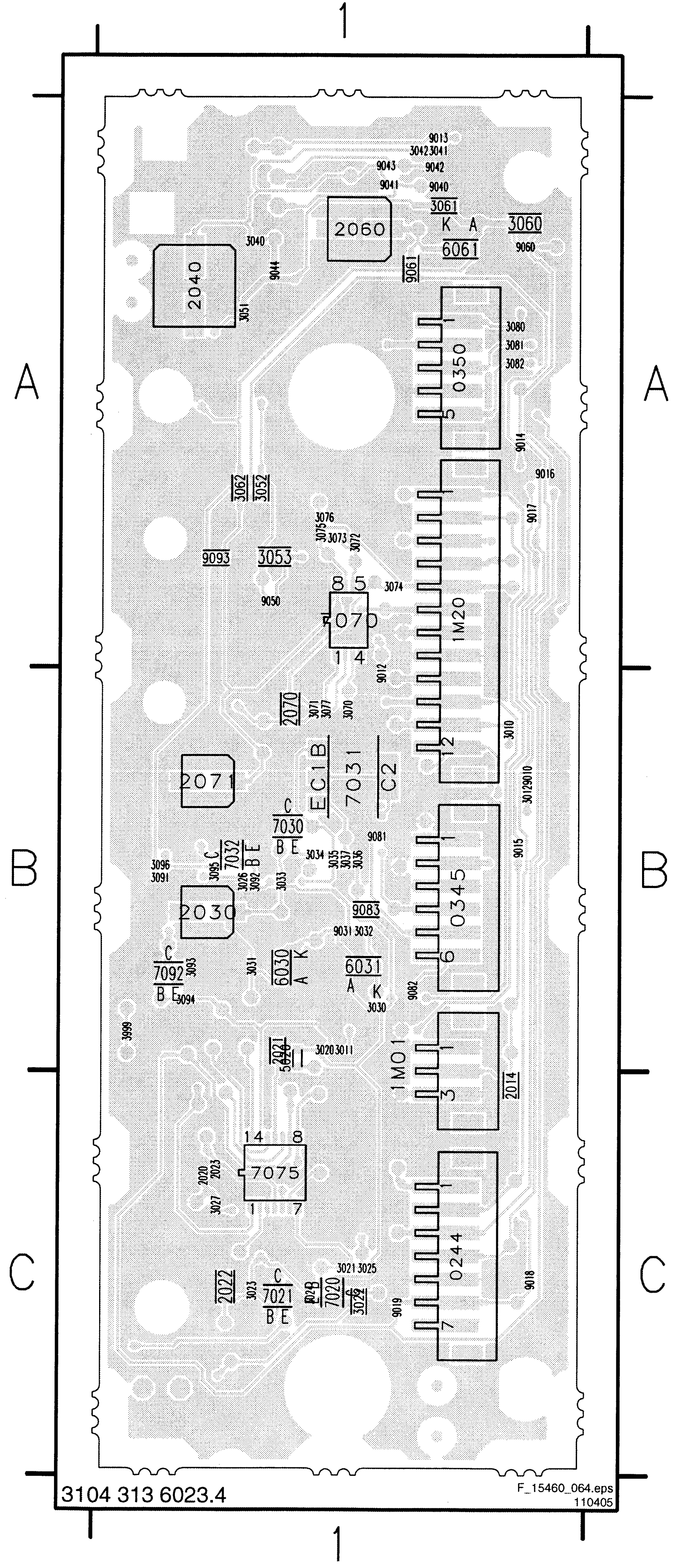
0244	C1
0345	B11
0350	C11
1020	E2
1040	F8
1M01	C1
1M20	A1
2014	D3
2020	F2
2021	E3
2022	F7
2023	F1
2030	I4
2040	F9
2060	C6
2070	F11
2071	G11
3010	B2
3011	A3
3012	B2
3020	E1
3021	E5
3022	E6
3023	E7
3024	E7
3025	E4
3026	F4
3027	E2
3030	H3
3031	H4
3032	I4
3033	H5
3034	H6
3035	H6
3036	H6
3037	H7
3040	E9
3041	G9
3042	F9
3051	B8
3052	B8
3053	C7
3060	C5
3061	B5
3062	B5
3070	G10
3071	F11
3072	G11
3073	G12
3074	F12
3075	F12
3076	G13
3077	G11
3080	C10
3081	C10
3082	C10
3091	H1
3092	G2
3093	H3
3094	G1
3095	I2
3096	H2
3999	I13
5020	D4
6030	H4
6031	I4
6051	C8
6060	C5
6061	B6
6070	G10
6080	E7
7020	E6
7021	F7
7030	H5
7031	H6
7032	I3
7070-1	F11
7070-2	F12
7075	E3
7092	H2
9010	C4
9012	B4
9013	E9
9014	C2
9015	A4
9016	A4
9017	A4
9018	C4
9019	C4
9031	H4
9040	G9
9041	F9
9042	G9
9043	F9
9044	E9
9050	C7
9060	C5
9061	B6
9081	B11
9082	B11
9083	C11
9093	H1
F010	A2
F011	A3
F012	A3
F013	B3
F014	B2
F015	A3
F016	B2
F017	A2
F018	B2
F019	B2
F020	B2
F021	D2
F027	E2
F028	E2
F029	E2
F030	E4
F031	D3
F032	E2
F033	F4
F038	I12
F039	I13
F083	B10
F084	B10
F086	B10
F087	C10
F088	B10
F089	B10
I019	E5
I020	C2
I021	E4
I022	C2
I023	C2
I024	C2
I025	C2
I026	F11
I027	E7
I028	F1
I029	F2
I030	E6
I031	E6
I032	E7
I033	I4
I034	G3
I035	E6
I036	F7
I037	H6
I038	H6
I039	H3
I040	H4
I041	G9
I042	G9
I043	F9
I044	E9
I045	F9
I046	E9
I047	H4
I048	H5
I049	H7
I051	D7
I052	B7
I061	C5
I062	B5
I063	C6
I064	D5
I071	F10
I072	F13
I073	G11
I074	G11
I075	F10
I076	F12
I093	G2
I094	G2
c001	E5

Layout LED and Switch Panel (Top Side)


1
A
B
C
3001
1040
A 6051 K
6060
A K
A
6070
K
1020
6080
A K
3104 313 6023.4
F_15460_063.eps
110405

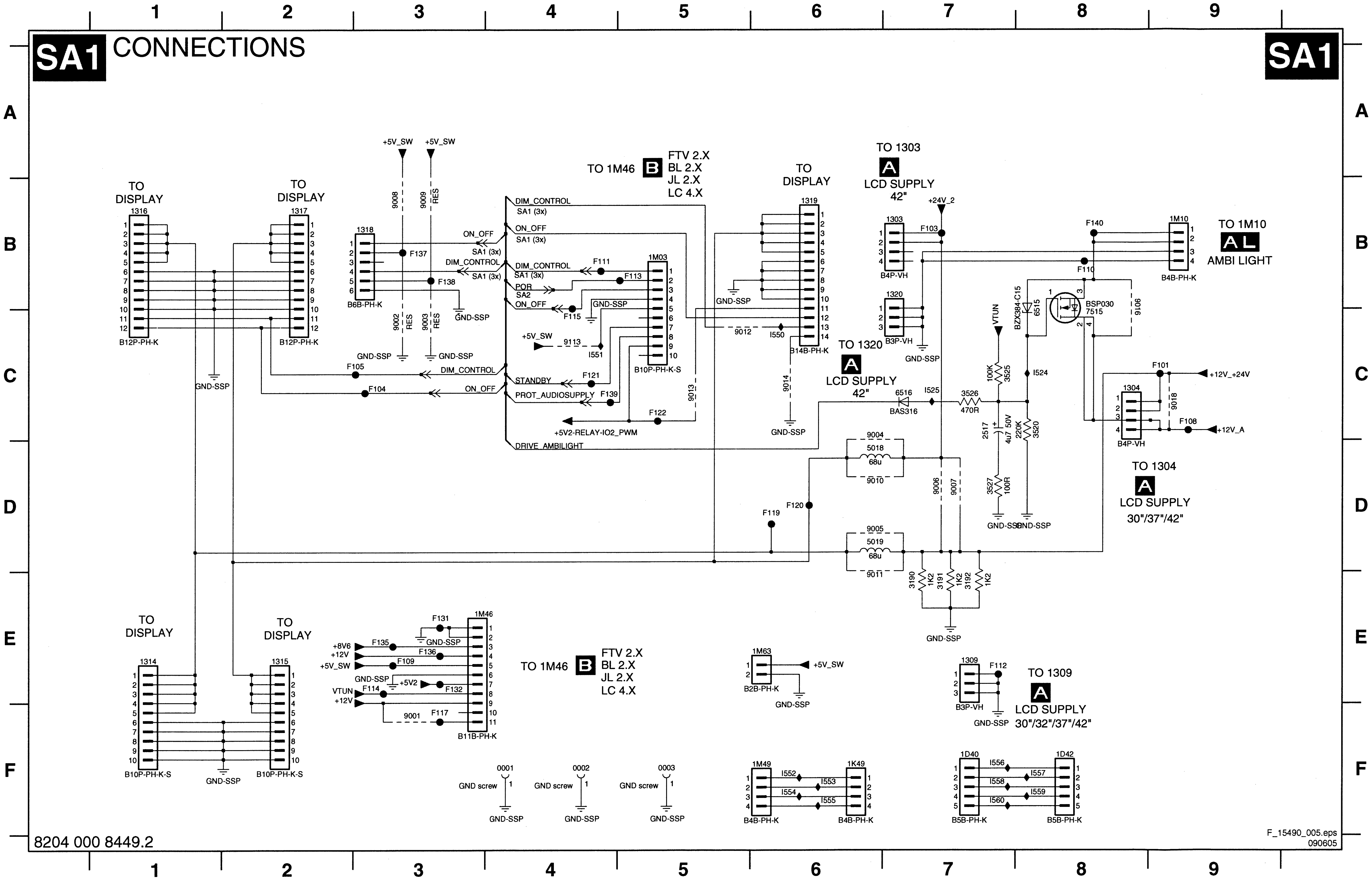
1020	C1
1040	A1
6051	A1
6060	A1
6070	A1
6080	C1

Layout LED and Switch Panel (Bottom Side)


1
A
B
C
2060
3061
K A
6061
3060
2040
0350
1M20
2071
7031
EC1B
C2
7030
B E
7032
2030
7092
6030
6031
1M01
2014
7075
14 8
1 7
0244
7021
7020
2022
7070
8 5
1 4
2070
3062
3052
9093
3053
3104 313 6023.4
F_15460_064.eps
110405

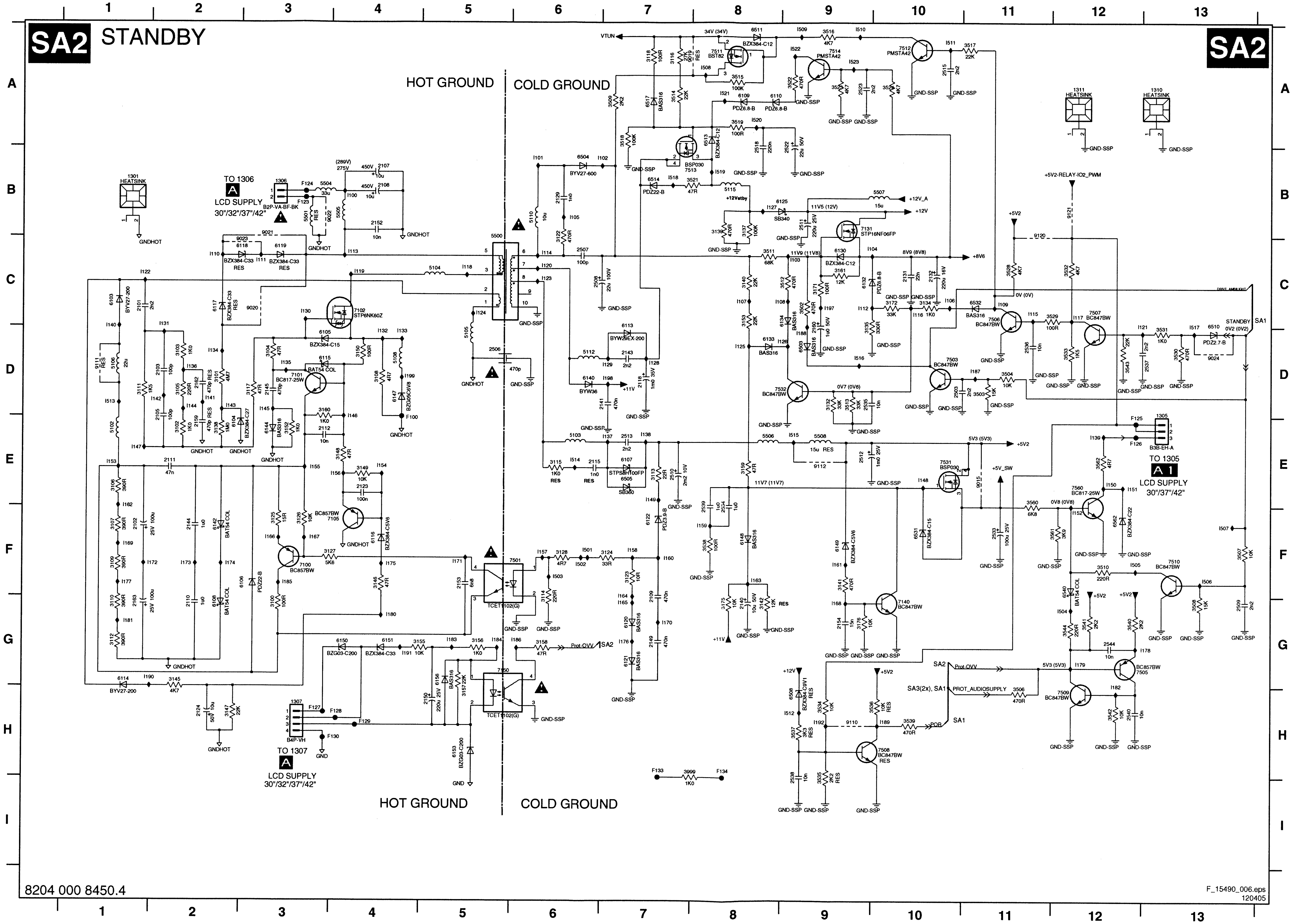
0244	C1
0345	B1
0350	A1
1M01	B1
1M20	A1
2014	C1
2020	C1
2021	B1
2022	C1
2023	C1
2030	B1
2040	A1
2060	A1
2070	B1
2071	B1
3010	B1
3011	B1
3012	B1
3020	B1
3021	C1
3022	C1
3023	C1
3024	C1
3025	C1
3026	B1
3027	C1
3030	B1
3031	B1
3032	B1
3033	B1
3034	B1
3035	B1
3036	B1
3037	B1
3040	A1
3041	A1
3042	A1
3051	A1
3052	A1
3053	A1
3060	A1
3061	A1
3062	A1
3070	B1
3071	B1
3072	A1
3073	A1
3074	A1
3075	A1
3076	A1
3077	B1
3080	A1
3081	A1
3082	A1
3091	B1
3092	B1
3093	B1
3094	B1
3095	B1
3096	B1
3999	B1
5020	B1
6030	B1
6031	B1
6061	A1
7020	C1
7021	C1
7030	B1
7031	B1
7032	B1
7070	A1
7075	C1
7092	B1
9010	B1
9012	B1
9013	A1
9014	A1
9015	B1
9016	A1
9017	A1
9018	C1
9019	C1
9031	B1
9040	A1
9041	A1
9042	A1
9043	A1
9044	A1
9050	A1
9060	A1
9061	A1
9081	B1
9082	B1
9083	B1
9093	A1

LCD Standby & Audio Panel: Connections


SA1
CONNECTIONS
SA1
TO DISPLAY
1316
B12P-PH-K
TO DISPLAY
1317
B12P-PH-K
1318
B6B-PH-K
+5V_SW
9008
9009 RES
F137
F138
9002 RES
9003 RES
GND-SSP
F105
F104
DIM_CONTROL
ON_OFF
SA1 (3x)
STANDBY
PROT_AUDIOSUPPLY
DRIVE_AMBILIGHT
POR
SA2
+5V2-RELAY-IO2_PWM
TO 1M46
B
FTV 2.X
BL 2.X
JL 2.X
LC 4.X
1M03
B10P-PH-K-S
F111
F113
F115
F121
F139
F122
9113
I551
9013
9012
I550
TO DISPLAY
1319
B14B-PH-K
9014
TO 1303
A
LCD SUPPLY
42"
+24V_2
1303
B4P-VH
F103
1320
B3P-VH
TO 1320
A
LCD SUPPLY
42"
6516
BAS316
I525
3526
470R
VTUN
3525
100K
2517
4u7 50V
3527
100R
BZX384-C15
6515
I524
3520
220K
BSP030
7515
9016
F140
F110
1M10
B4B-PH-K
TO 1M10
AL
AMBI LIGHT
1304
B4P-VH
F101
+12V_+24V
9018
F108
+12V_A
TO 1304
A
LCD SUPPLY
30"/37"/42"
9004
5018
68u
9010
9006
9007
F119
F120
9005
5019
68u
9011
3190 1K2
3191 1K2
3192 1K2
TO DISPLAY
1314
B10P-PH-K-S
TO DISPLAY
1315
B10P-PH-K-S
1M46
B11B-PH-K
F131
F135
F136
F109
F132
F114
F117
9001
+8V6
+12V
+5V_SW
+5V2
VTUN
TO 1M46
B
FTV 2.X
BL 2.X
JL 2.X
LC 4.X
1M63
B2B-PH-K
+5V_SW
1309
B3P-VH
F112
TO 1309
A
LCD SUPPLY
30"/32"/37"/42"
0001
0002
0003
GND screw
1M49
B4B-PH-K
1K49
B4B-PH-K
I552
I553
I554
I555
1D40
B5B-PH-K
1D42
B5B-PH-K
I556
I557
I558
I559
I560
8204 000 8449.2
F_15490_005.eps
090605
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

0001	F4
0002	F4
0003	F5
1303	B7
1304	C8
1309	E7
1314	E1
1315	E2
1316	B1
1317	B2
1318	B3
1319	B6
1320	B7
1D40	F7
1D42	F8
1K49	F6
1M03	B5
1M10	B9
1M46	E4
1M49	F6
1M63	E6
2517	C7
3190	E7
3191	E7
3192	E7
3520	C8
3525	C7
3526	C7
3527	D7
5018	D6
5019	D6
6515	B8
6516	C7
7515	C8
9001	F3
9002	C3
9003	C3
9004	C6
9005	D6
9006	D7
9007	D7
9008	B3
9009	B3
9010	D6
9011	E6
9012	C5
9013	C5
9014	C6
9016	B8
9018	C9
9113	C4
F101	C9
F103	B7
F104	C3
F105	C3
F108	C9
F109	E3
F110	B8
F111	B4
F112	E7
F113	B5
F114	E3
F115	C4
F117	F3
F119	D6
F120	D6
F121	C4
F122	C5
F131	E3
F132	E3
F135	E3
F136	E3
F137	B3
F138	B3
F139	C4
F140	B8
I524	C8
I525	C7
I550	C6
I551	C4
I552	F6
I553	F6
I554	F6
I555	F6
I556	F7
I557	F8
I558	F7
I559	F8
I560	F7

LCD Standby & Audio Panel: Standby


SA2
STANDBY
SA2
HOT GROUND
COLD GROUND
HOT GROUND
COLD GROUND
1301 HEATSINK
GNDHOT
TO 1306
A
LCD SUPPLY
30"/32"/37"/42"
1306
B2P-VA-BF-BK
1307
B4P-VH
TO 1307
A
LCD SUPPLY
30"/32"/37"/42"
GND
5500
7102 STP6NK60Z
7101 BC817-25W
7100 BC857BW
7105 BC857BW
7501 TCET1102(G)
7150 TCET1102(G)
6114 BYV27-200
6103 BYV27-200
6504 BYV27-600
6107 STPS8H100FP
6113 BYW29EX-200
6140 BYW36
VTUN
34V (34V)
7511 BST82
7514 PMSTA42
7512 PMSTA42
7513 BSP030
7131 STP16NF06FP
+12V_A
+12V
+12Vstby
11V5 (12V)
11V9 (11V8)
8V9 (8V8)
+8V6
+11V
5V3 (5V3)
+5V2
+5V_SW
11V7 (11V7)
7531 BSP030
7532 BC847BW
7503 BC847BW
7506 BC847BW
7507 BC847BW
7560 BC817-25W
7510 BC847BW
7140 BC847BW
7505 BC857BW
7509 BC847BW
7508 BC847BW
0V (0V)
0V7 (0V8)
0V8 (0V8)
0V2 (0V2)
STANDBY SA1
+5V2-RELAY-IO2_PWM
1311 HEATSINK
1310 HEATSINK
GND-SSP
1305
B3B-EH-A
TO 1305
A 1
LCD SUPPLY
30"/37"/42"
SA2 Prot-OVV
Prot-OVV SA2
SA3(2x), SA1 PROT_AUDIOSUPPLY
POR SA1
F133 3999 1K0 F134
1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I

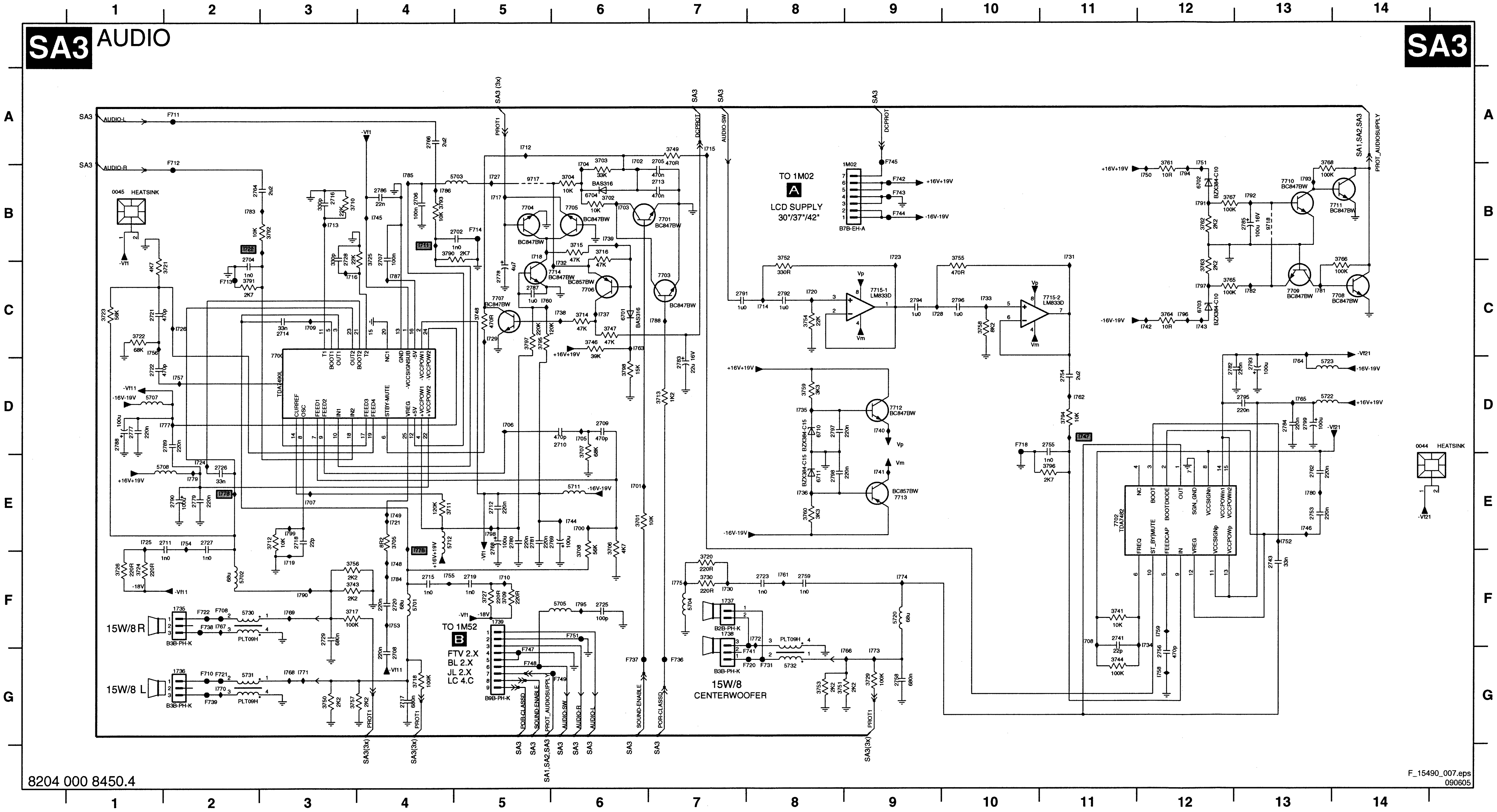
8204 000 8450.4

F_15490_006.eps
120405

1301	B1
1305	D13
1306	B3
1307	H3
1310	A13
1311	A12
2101	C1
2102	F1
2103	D2
2105	D2
2107	B4
2108	B4
2109	F7
2110	G2
2111	E2
2112	E3
2115	E6
2118	D7
2123	E4
2124	H2
2129	B6
2131	C10
2132	C10
2140	G8
2141	D7
2143	D7
2144	F2
2145	D3
2149	G7
2150	H5
2152	B4
2153	F5
2154	G9
2159	E2
2160	C9
2162	D2
2163	G1
2503	D10
2506	D5
2507	C6
2508	C6
2509	G13
2510	E7
2511	B9
2512	E9
2513	E7
2515	A10
2518	A8
2522	A9
2523	A9
2533	F11
2534	E8
2535	D9
2536	D11
2537	D13
2538	H9
2539	E8
2540	H12
2544	G12
3100	G3
3101	D2
3102	E2
3103	D2
3104	D3
3105	D2
3106	E1
3107	F1
3108	D4
3109	F1
3110	G1
3111	D1
3112	G1
3113	E7
3114	F6
3115	E6
3116	A7
3117	D3
3118	A7
3122	B6
3123	F7
3124	F7
3125	F3
3126	F3
3127	F3
3128	F6
3132	D9
3134	C10
3135	C9
3137	B8
3138	E2
3139	B8
3140	C8
3141	F9
3142	G8
3145	G2
3146	F4
3147	H2
3148	E4
3149	E4
3150	D4
3152	E3
3153	C8
3155	G4
3156	G5
3157	H5
3158	G6
3159	E8
3160	D3
3161	C9
3171	C9
3172	C10
3175	G8
3176	G9
3502	C9
3503	D11
3504	D11
3506	H11
3507	F13
3508	G13
3509	A7
3510	F12
3511	C8
3512	C9
3513	D9
3514	A7
3515	A8
3516	A9
3517	A11
3518	A7
3519	A8
3521	B7
3522	A9
3523	A9
3524	A10
3528	C11
3529	C11
3530	D13
3531	D13
3532	C12
3533	D12
3534	H9
3535	H9
3536	H10
3537	H9
3538	F8
3539	H10
3540	G12
3541	G12
3542	H12
3543	D12
3544	G12
3560	E11
3561	F12
3562	E12
3999	H7
5102	E1
5103	E6
5104	C5
5105	D5
5106	D1
5108	D4
5110	B6
5112	D6
5115	B8
5500	C5
5501	B3
5504	B3
5505	B4
5506	E8
5507	B10
5508	E9
6103	C1
6104	E2
6105	D3
6106	F2
6107	E7
6108	G2
6109	A8
6110	A8
6113	C7
6114	G1
6115	D3
6116	F4
6117	C2
6118	C2
6119	C3
6120	G7
6121	G7
6122	F7
6125	B8
6130	C9
6132	C9
6133	D8
6134	C9
6140	D6
6142	F2
6144	E3
6147	D4
6148	F8
6149	F9
6150	G4
6151	G4
6153	H5
6156	G5
6503	D9
6504	B6
6505	E7
6508	H9
6510	C13
6511	A8
6513	A8
6514	B7
6517	A7
6531	F10
6532	C11
6540	F12
6562	F12
7100	F3
7101	D3
7102	C4
7105	F4
7131	B9
7140	G10
7150	G5
7501	F6
7503	D10
7505	G12
7506	C11
7507	C12
7508	H10
7509	H12
7510	F13
7511	A8
7512	A10
7513	B7
7514	A9
7531	E10
7532	D9
7560	E12
9015	E11
9019	A7
9020	C3
9021	B3
9022	B3
9023	C2
9024	D13
9110	H9
9111	D1
9112	E9
9120	B11
9121	B12
F100	E4
F123	B3
F124	B3
F125	E12
F126	E12
F127	H3
F128	H4
F129	H4
F130	H4
F133	H7
F134	H8
I100	B4
I101	B6
I102	B6
I103	C9
I104	C9
I105	B6
I106	C10
I107	C8
I108	C8
I109	C11
I110	C2
I111	C3
I112	C9
I113	C4
I114	C6
I115	C11
I116	C10
I117	C12
I118	C5
I119	C4
I120	C6
I121	C12
I122	C1
I123	C6
I124	C5
I125	D8
I126	D9
I127	B8
I128	D7
I129	D7
I130	C3
I131	C2
I132	D4
I133	D4
I134	D2
I135	D3
I136	D2
I137	E7
I138	E7
I139	E12
I140	C1
I141	D2
I142	D2
I143	D2
I144	D2
I145	D3
I146	D4
I147	E1
I148	E10
I149	E7
I150	E12
I151	E12
I152	F12
I153	E1
I154	E4
I155	E3
I156	E4
I157	F6
I158	F7
I159	F8
I160	F7
I161	F9
I162	E1
I163	F8
I164	F7
I165	G7
I166	F3
I167	F3
I168	G9
I169	F1
I170	G7
I171	F5
I172	F2
I173	F2
I174	F2
I175	F4
I176	G7
I177	F1
I178	G13
I179	G12
I180	G4
I181	G1
I182	G12
I183	G5
I184	G5
I185	F3
I186	G6
I187	D11
I188	D9
I189	H10
I190	G1
I191	G4
I192	H9
I197	C9
I198	D7
I199	D4
I501	F6
I502	F6
I503	F6
I504	G12
I505	F12
I506	F13
I507	F13
I508	A8
I509	A9
I510	A9
I511	A10
I512	H9
I513	D1
I514	E6
I515	E9
I516	D9
I517	C13
I518	B7
I519	B8
I520	A8
I521	A8
I522	A9
I523	A9

LCD Standby & Audio Panel: Audio

0044 D14	2705 A7	2715 F4	2726 E2	2758 G9	2780 E5	2790 E2	3701 E6	3711 E4	3722 C1	3744 G11	3755 B10	3765 C12	3796 E11	5711 E6	6703 C12	7706 C6	7715-2 C11	F720 G8	F743 B9	I703 B6	I713 B3	I723 B9	I733 C10	I743 C12	I753 F4	I763 C6	I773 G9	I783 B2	I794 B12
0045 B1	2706 B4	2716 B3	2727 E2	2759 F8	2781 E5	2791 C7	3702 B6	3712 E3	3723 C1	3746 C6	3756 F3	3766 C14	3797 C5	5712 E4	6704 B6	7707 C5	9717 B5	F721 G2	F744 B9	I704 A6	I714 C8	I724 E2	I734 F12	I744 E6	I754 E2	I764 D13	I774 F9	I784 F4	I795 F6
1735 F2	2707 B4	2717 G4	2728 B3	2762 E13	2782 D12	2792 C8	3703 A6	3713 D7	3724 F1	3747 C6	3757 G3	3767 B12	3798 D6	5720 F9	6710 D8	7708 C13	9718 B13	F722 F2	F745 A9	I705 D6	I715 A7	I725 E1	I735 D8	I745 B4	I755 F4	I765 D13	I775 F7	I785 B4	I796 C12
1736 G2	2708 G4	2718 E3	2729 F3	2764 B2	2783 D7	2793 D13	3704 B6	3714 C6	3725 B4	3748 C5	3758 C10	3768 B13	5701 F4	5722 D13	6711 E8	7709 C13	F708 F2	F731 G8	F747 G5	I706 D5	I716 C3	I726 C2	I736 E8	I746 E13	I756 C1	I766 G9	I776 E4	I786 B4	I797 C12
1737 F7	2709 D6	2719 F5	2741 F11	2766 A4	2784 D13	2794 C9	3705 E4	3715 B6	3726 F1	3749 A7	3759 D8	3790 B4	5702 F2	5723 D13	7700 C3	7710 B13	F710 G2	F736 G7	F748 G5	I707 E3	I717 B5	I727 B5	I737 C6	I747 D11	I757 D2	I767 F2	I777 D2	I787 C4	I798 E5
1738 F7	2710 D6	2720 F4	2743 F13	2768 E5	2785 B13	2795 D13	3706 E6	3716 B6	3727 F5	3750 G3	3760 E8	3791 C2	5703 B5	5730 F2	7701 B7	7711 B13	F711 A2	F737 G6	F749 G6	I708 F11	I718 B5	I728 C9	I738 C6	I748 F4	I758 G12	I768 G3	I778 E2	I788 C7	I799 E3
1739 F5	2711 E2	2721 C1	2753 E13	2769 E5	2786 B4	2796 C10	3707 D6	3717 F3	3729 G9	3751 G8	3761 B12	3792 B3	5704 F7	5731 G2	7702 E11	7712 D9	F712 B2	F738 F2	F751 F6	I709 C3	I719 F3	I729 C5	I739 B6	I749 E4	I759 F12	I769 F3	I779 E2	I790 F3	
1M02 A9	2712 E5	2722 D1	2754 D11	2777 D1	2787 C5	2797 D8	3708 F6	3718 G4	3730 F7	3752 B8	3762 B12	3793 B4	5705 F6	5732 G8	7703 C7	7713 E9	F713 C2	F739 G2	I700 E6	I710 F5	I720 C8	I730 F7	I740 D9	I750 B12	I760 C5	I770 G2	I780 E13	I791 B12	
2702 B5	2713 B7	2723 F8	2755 D11	2778 C5	2788 D1	2798 E8	3709 F5	3720 F7	3741 F11	3753 G8	3763 C12	3794 D11	5707 D1	6701 C6	7704 B5	7714 C5	F714 B5	F741 G8	I701 E6	I711 B4	I721 E4	I731 B11	I741 E9	I751 A12	I761 F8	I771 G3	I781 C13	I792 B13	
2704 C2	2714 C3	2725 F6	2756 G12	2779 E2	2789 D2	2799 D13	3710 B3	3721 C1	3743 F3	3754 C8	3764 C12	3795 C5	5708 E1	6702 B12	7705 B6	7715-1 C9	F718 D10	F742 B9	I702 A6	I712 A5	I722 B2	I732 C6	I742 C12	I752 E13	I762 D11	I772 F8	I782 C13	I793 B13	


SA3
AUDIO
SA3
AUDIO-L
AUDIO-R
0045 HEATSINK
0044 HEATSINK
TDA1490L
7700
TDA7482
7702
LM833D
7715-1
7715-2
BC847BW
BC857BW
BAS316
BZX384-C10
BZX384-C15
TO 1M02
A
LCD SUPPLY
30"/37"/42"
B7B-EH-A
+16V+19V
-16V-19V
TO 1M52
B
FTV 2.X
BL 2.X
JL 2.X
LC 4.C
B9B-PH-K
15W/8 R
15W/8 L
15W/8
CENTERWOOFER
B3B-PH-K
B2B-PH-K
PLT09H
PROT1
DCPROT
AUDIO-SW
PROT_AUDIOSUPPLY
SOUND-ENABLE
POR-CLASSD
SA1,SA2,SA3
SA3(3x)
Vp
Vm
-Vf1
-Vf21
1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G
8204 000 8450.4
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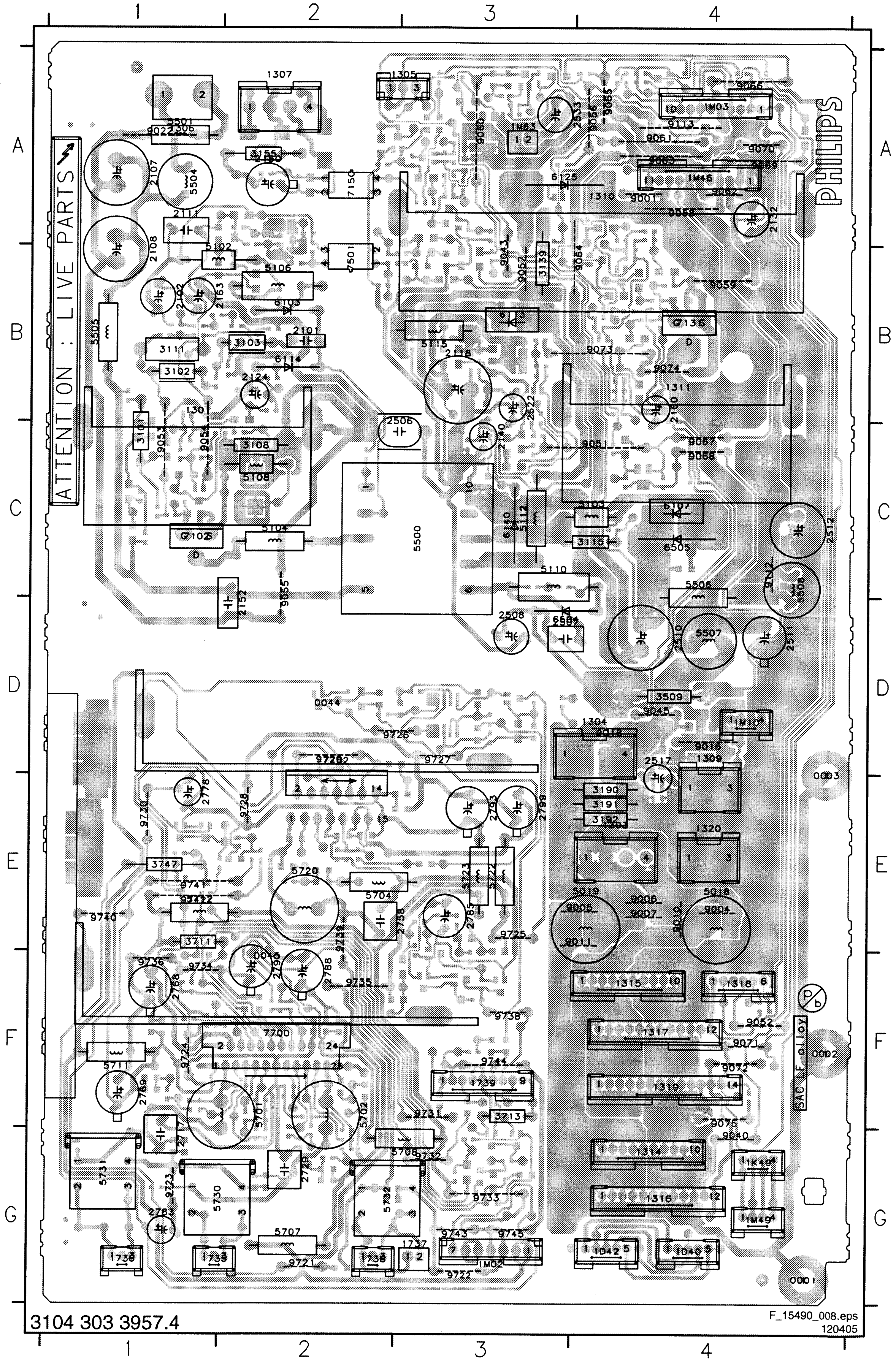
090605

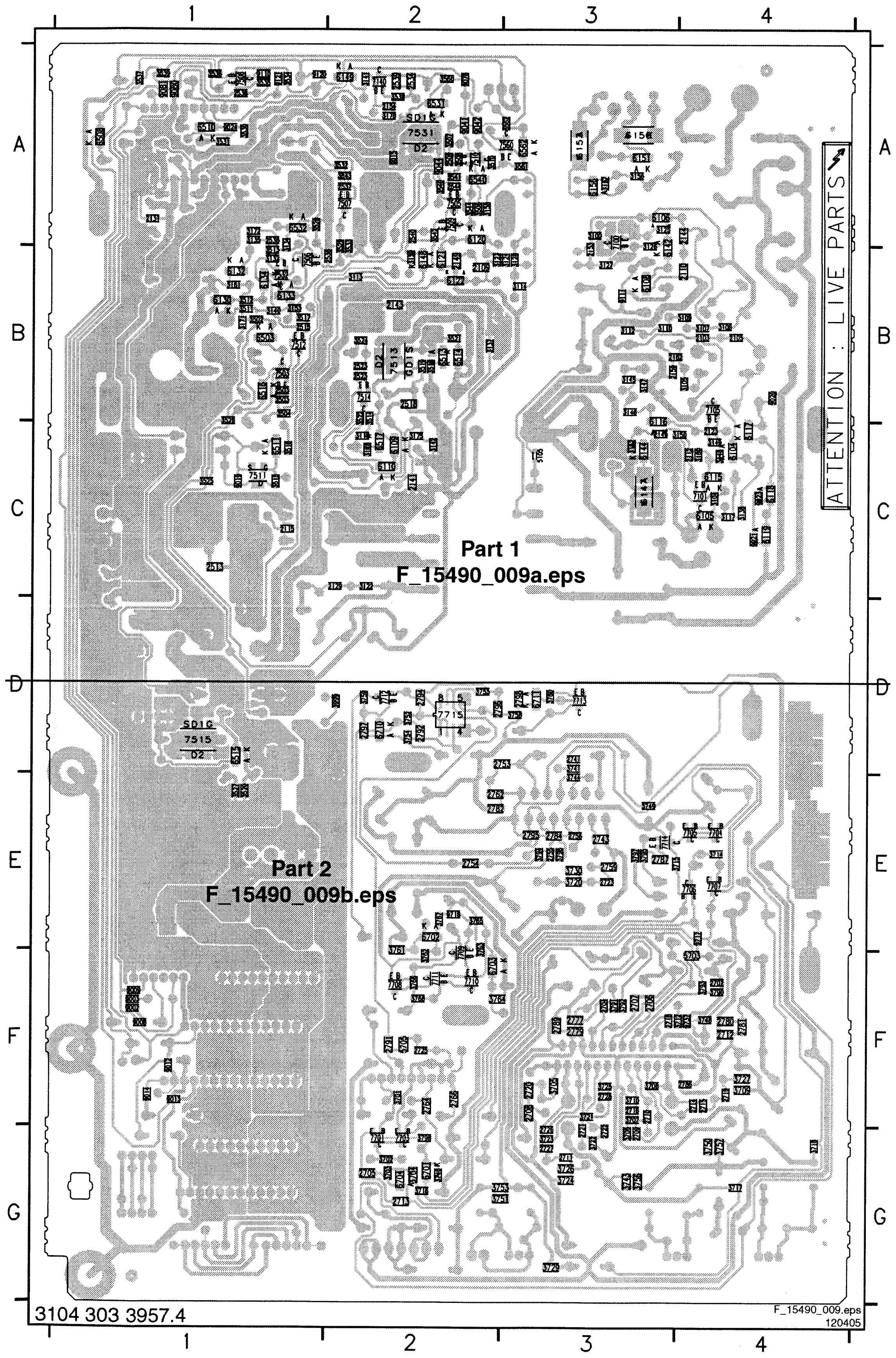
Layout LCD Standby & Audio Panel (Top Side)

0001	G4
0002	F4
0003	D4
0044	D1
0045	E1
1301	C1
1303	E4
1304	D4
1305	A3
1306	A1
1307	A2
1309	D4
1310	A3
1311	B4
1314	G4
1315	F4
1316	G4
1317	F4
1318	F4
1319	F4
1320	E4
1735	G1
1736	G1
1737	G3
1738	G2
1739	F3
1D40	G4
1D42	G4
1K49	G4
1M02	G3
1M03	A4
1M10	D4
1M46	A4
1M49	G4
1M63	A3
2101	B2
2102	B1
2107	A1
2108	A1
2111	A1
2118	B3
2124	B2
2132	A4
2140	C3
2150	A2
2152	D2
2160	B4
2163	B1
2506	B2
2507	D3
2508	D3
2510	D4
2511	D4
2512	C4
2517	D4
2522	B3
2533	A4
2717	F1
2729	G2
2758	E3
2768	F1
2769	F1
2778	E1
2783	G1
2785	E3
2788	F2
2790	E2
2793	E3
2799	E3
3101	C1
3102	B1
3103	B2
3108	C2
3111	B1
3115	C4
3139	B3
3155	A2
3190	E3
3191	E3
3192	E3
3509	D4
3711	F1
3713	F3
3747	E1
5018	E4
5019	E4
5102	B2
5103	C4
5104	C2
5106	B2
5108	C2
5110	C3
5112	C3
5115	B3
5500	C3
5501	A1
5504	A1
5505	B1
5506	C4
5507	D4
5508	C4
5701	F2
5702	F2
5704	E2
5707	G2
5708	G3
5711	F1
5712	E1
5720	E2
5722	E3
5723	E3
5730	G2
5731	G1
5732	G3
6103	B2
6107	C4
6113	B3
6114	B2
6125	A3
6140	C3
6504	D3
6505	C4
7102	C1
7131	B4
7150	A2
7501	B2
7700	F2
7702	D2
9001	A4
9004	E4
9005	E4
9006	E4
9007	E4
9010	E4
9011	E4
9016	D4
9018	D4
9022	A1
9040	G4
9043	B3
9045	D4
9051	C4
9052	F4
9053	B1
9054	B1
9055	C2
9056	A4
9057	A3
9058	A4
9059	B4
9060	A3
9061	A4
9062	A4
9063	A4
9064	A3
9065	A4
9066	A4
9067	C4
9068	C4
9069	A4
9070	A4
9071	F4
9072	F4
9073	B4
9074	B4
9075	F4
9112	C4
9113	A4
9721	G2
9722	G3
9723	G1
9724	F1
9725	E3
9726	D2
9727	D3
9728	E2
9729	D2
9730	E1
9731	F3
9732	G3
9733	G3
9734	F1
9735	F3
9736	F1
9738	F3
9739	F2
9740	E1
9741	E1
9742	E1
9743	G3
9744	F3
9745	G3

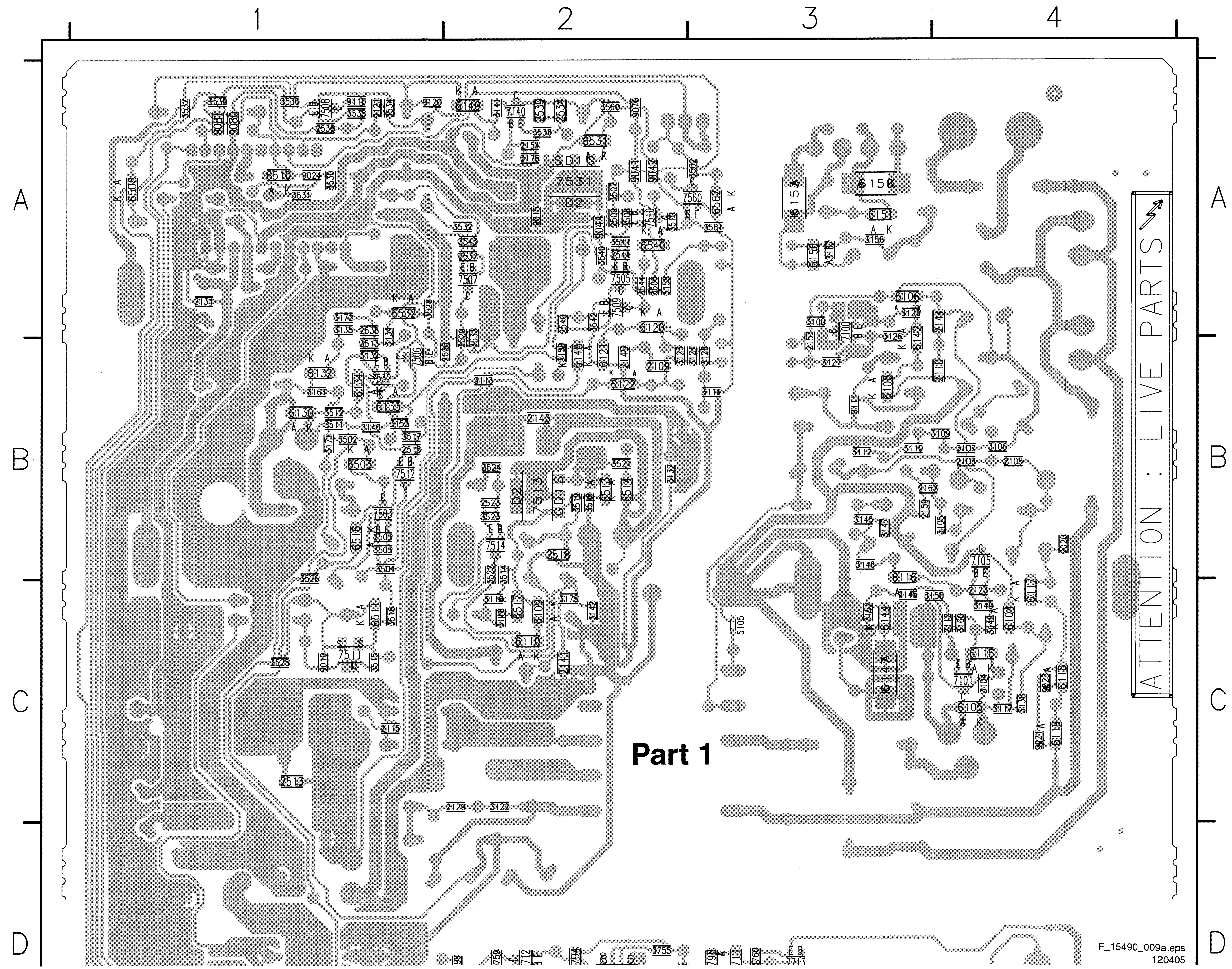


Layout LCD Standby & Audio Panel (Overview Bottom Side)

2103	B4
2105	B4
2109	B2
2110	B4
2112	C4
2115	C1
2123	C4
2129	C2
2131	A1
2141	C2
2143	B2
2144	A4
2145	C3
2149	B2
2153	B3
2154	A2
2159	B3
2162	B3
2503	B1
2509	A2
2513	C1
2515	B1
2518	B2
2523	B2
2534	A2
2535	A1
2536	B2
2537	A2
2538	A1
2539	A2
2540	A2
2544	A2
2702	F4
2704	F3
2705	G2
2706	F3
2707	F3
2708	F3
2709	G3
2710	F3
2711	G3
2712	F4
2713	G2
2714	F4
2715	F4
2716	F3
2718	F3
2719	F4
2720	F3
2721	G3
2722	G3
2723	E3
2725	F2
2726	G3
2727	G3
2728	F3
2741	D3
2743	E3
2753	D3
2754	E2
2755	E3
2756	E3
2759	E3
2762	E2
2764	F2
2766	F2
2777	F3
2779	F3
2780	F4
2781	F4
2782	E2
2784	E3
2786	F4
2787	E3
2789	F3
2791	F2
2792	D2
2794	D2
2795	E3
2796	D2
2797	D2
2798	D3
3100	A3
3104	C4
3105	B4
3106	B4
3107	B4
3109	B4
3110	B3
3112	B3
3113	B2
3114	B3
3116	C2
3117	C4
3118	C2
3122	C2
3123	B2
3124	B3
3125	A3
3126	A3
3127	B3
3128	B3
3132	B1
3134	A1
3135	A1
3137	B2
3138	C4
3140	B1
3141	A2
3142	C2
3145	B3
3146	B3
3147	B3
3148	C4
3149	C4
3150	C4
3152	C3
3153	B1
3156	A3
3157	A3
3158	A2
3159	B2
3160	C4
3161	B1
3171	B1
3172	A1
3175	C2
3176	A2
3502	B1
3503	B1
3504	B1
3506	A2
3507	A2
3508	A2
3510	A2
3511	B1
3512	B1
3513	B1
3514	B2
3515	C1
3516	C1
3517	B1
3518	B2
3519	B2
3520	E1
3521	B2
3522	B2
3523	B2
3524	B2
3525	C1
3526	B1
3527	E1
3528	A1
3529	B2
3530	A1
3531	A1
3532	A2
3533	B2
3534	A1
3535	A1
3536	A1
3537	A1
3538	A2
3539	A1
3540	A2
3541	A2
3542	A2
3543	A2
3544	A2
3560	A2
3561	A3
3562	A3
3701	F2
3702	G2
3703	G2
3704	G2
3705	F3
3706	G3
3707	F3
3708	F3
3709	F4
3710	F3
3712	F4
3714	E4
3715	E3
3716	G2
3717	G4
3718	G4
3720	E3
3721	F3
3722	G3
3723	G3
3724	G3
3725	F3
3726	G3
3727	F4
3729	G3
3730	E3
3741	D3
3743	G3
3744	E3
3746	G2
3748	F4
3749	E3
3750	G4
3751	G3
3752	D2
3753	G3
3754	D2
3755	D2
3756	G3
3757	G4
3758	D3
3759	D2
3760	D3
3761	F2
3762	F2
3763	E2
3764	F2
3765	E2
3766	F2
3767	E2
3768	F2
3790	F4
3791	F3
3792	F3
3793	F4
3794	E3
3795	E3
3796	E3
3797	E3
3798	G2
3999	D2
5105	C3
5703	F4
5705	F2
6104	C4
6105	C4
6106	A3
6108	B3
6109	C2
6110	C2
6115	C4
6116	B3
6117	B4
6118	C4
6119	C4
6120	A2
6121	B2
6122	B2
6130	B1
6132	B1
6133	B1
6134	B1
6142	B3
6144	C3
6147	C3
6148	B2
6149	A2
6150	A3
6151	A3
6153	A3
6156	A3
6503	B1
6508	A1
6510	A1
6511	C1
6513	B2
6514	B2
6515	D1
6516	B1
6517	C2
6531	A2
6532	A1
6540	A2
6562	A3
6701	G2
6702	E2
6703	F3
6704	G2
6710	D2
6711	D3
7100	A3
7101	C4
7105	B4
7140	A2
7503	B1
7505	A2
7506	B1
7507	A2
7508	A1
7509	A2
7510	A2
7511	C1
7512	B1
7513	B2
7514	B2
7515	D1
7531	A2
7532	B1
7560	A3
7701	G2
7703	G2
7704	E4
7705	E4
7706	E4
7707	E4
7708	F2
7709	F2
7710	F2
7711	F2
7712	D2
7713	D3
7714	E3
7715	D2
9002	F1
9003	F1
9008	F1
9009	F1
9012	F1
9013	F1
9014	F1
9015	A2
9019	C1
9020	B4
9021	C4
9023	C4
9024	A1
9041	A2
9042	A2
9044	A2
9076	A2
9080	A1
9081	A1
9110	A1
9111	B3
9120	A1
9121	A1
9717	E4
9718	E2
9737	F4



Layout LCD Standby & Audio Panel (Part 1 Bottom Side)


1
2
3
4
A
B
C
D
Part 1
ATTENTION : LIVE PARTS
3537
3539
9081
9080
3536
7508
2538
9110
3535
9121
3534
9120
6149
3141
7140
2539
2534
3560
9076
3538
6531
2154
3176
SD1G
7531
D2
9041
9042
3562
7560
6562
3561
9015
3507
2509
3508
7510
3510
9044
3541
2544
6540
3540
3544
3506
3158
7505
7509
3542
2540
6120
3139
6148
6121
2149
2109
3123
3124
3128
6122
3114
3532
3543
2537
7507
3529
3533
2536
6510
9024
3530
3531
6508
2131
3172
3135
2535
3513
3132
3134
7506
6532
3528
7532
6132
3161
6134
6133
3113
6130
3512
3511
3140
3153
3517
2515
3171
3502
6503
7512
2143
3524
D2
7513
GD1S
3519
3518
6513
6514
3521
3137
2523
3523
7514
7503
6516
2503
3503
3504
2518
3526
3522
3514
3116
3118
6517
6109
3175
3142
6511
3516
6110
2141
7511
3525
9019
3515
2115
2513
2129
3122
5105
6153
6150
6151
3156
6156
3157
6106
3125
3100
2153
7100
3126
6142
2144
3127
2110
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9111
3109
3112
3110
3107
3106
2103
2105
2162
2159
3105
3145
3147
9020
3146
7105
6116
2123
6117
2145
3150
3149
3162
6144
2112
3160
3148
6104
6115
6147
7101
3104
9023
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6105
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3138
9021
6119
3755
7713

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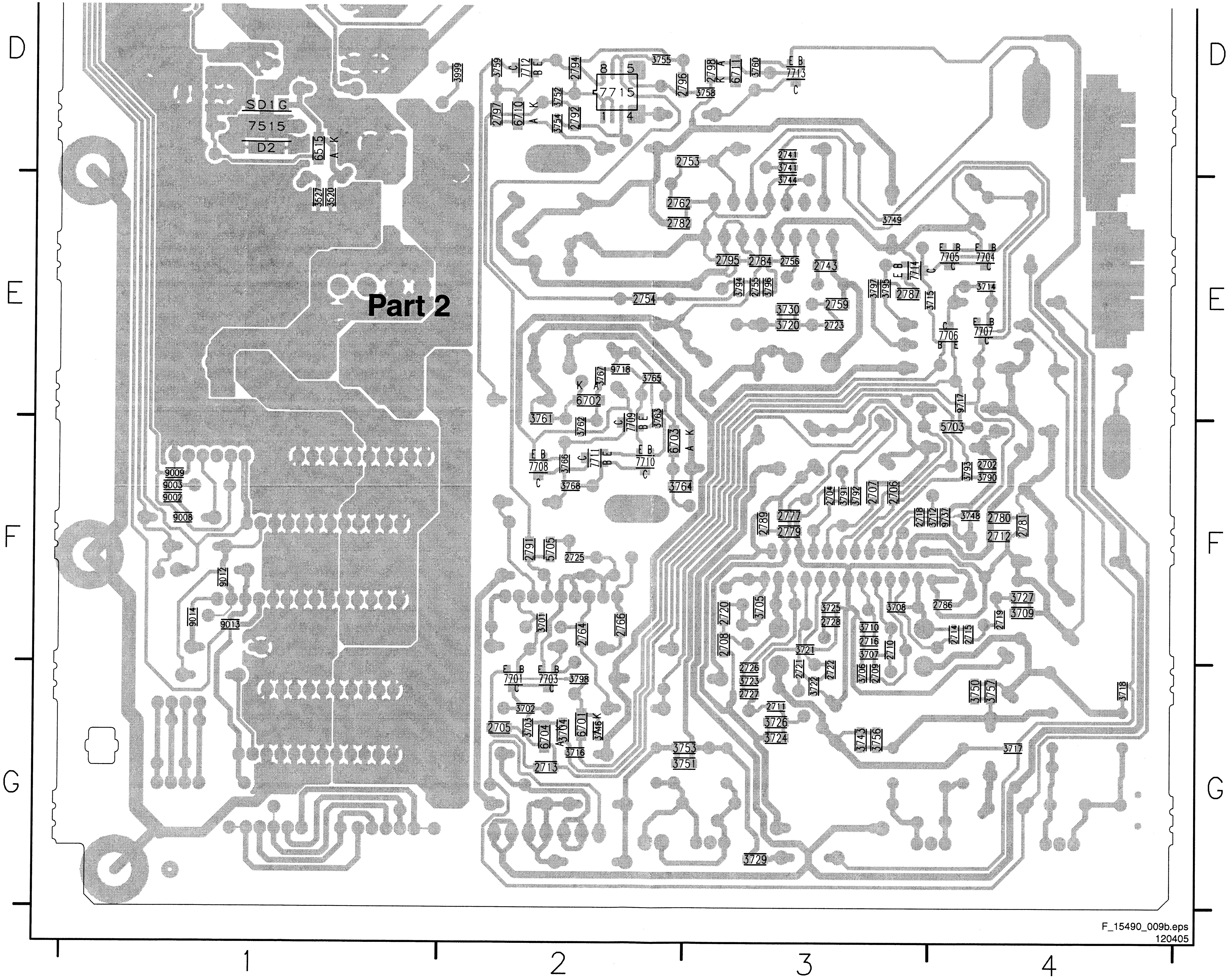
Layout LCD Standby & Audio Panel (Part 2 Bottom Side)


D
E
F
G
1
2
3
4
Part 2
SD1G
7515
D2
6515
3527
3620
3999
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2797
6710
3752
3754
2792
2794
7715
8
5
1
4
3755
2796
3758
2798
6711
3760
7713
2753
2741
3741
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6702
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7709
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7708
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7711
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3768
3764
9717
5703
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2702
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9009
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9008
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2718
3712
9737
3748
2780
2712
2781
2791
5705
2725
9012
9014
9013
3701
2764
2766
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2708
3705
3725
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3708
2786
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3723
2727
3706
2709
3750
3757
3718
7701
7703
3798
3702
2705
3703
6704
3704
6701
3746
3716
2713
3753
3751
2711
3726
3724
3743
3756
3717
3729

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8. Alignments

Index of this chapter:

8.1 General Alignment Conditions
8.2 Hardware Alignments
8.3 Software Alignments
8.4 Option Settings

Note: The Service Default Mode (SDM) and Service Alignment Mode (SAM) are described in chapter 5. Menu navigation is done with the CURSOR UP, DOWN, LEFT or RIGHT keys of the remote control transmitter.

8.1 General Alignment Conditions

8.1.1 Start Conditions

Perform all electrical adjustments under the following conditions:

- Power supply voltage (depends on region):
  - **AP-NTSC:** 120 V_{AC} or 230 V_{AC} / 50 Hz (± 10%).
  - **AP-PAL-multi**: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - **EU**: 230 V_{AC} / 50 Hz (± 10%).
  - **LATAM-NTSC**: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - **US**: 120 V_{AC} / 60 Hz (± 10%).
- Connect the set to the mains via an isolation transformer with low internal resistance.
- Allow the set to warm up for approximately 15 minutes.
- Measure voltages and waveforms in relation to chassis ground (with the exception of the voltages on the primary side of the power supply).
  Caution: never use heatsinks as ground.
- Test probe: Ri > 10 Mohm, Ci < 20 pF.
- Use an isolated trimmer/screwdriver to perform alignments.

8.1.2 Initial Settings

Perform all electrical adjustments with the following initial settings (via the "Active Control" button on the RC):

1. To avoid the working of the lightsensor, set "Active Control" to "Off".
2. Set "Smart Picture" to "Natural".
3. Set "Active Display" to "Off"

8.1.3 Alignment Sequence

- First, set the correct options:
  - In SAM, select SERVICE OPTIONS -> OPT. NO,
  - Fill in the option settings according to the set sticker (see also paragraph "Option Settings"),
  - Select STORE OPTIONS and push "OK" on the remote control,
  - After storing, the set must be restarted!
- Warming up (>10 minutes).
- White-D alignment.

8.2 Hardware Alignments

8.2.1 Backlight Voltage Alignment

Switch the set "on" and measure the voltage between pin 1 of connector 1304 and pin 1 of connector 1309 (ground). Align potmeter R3026 until this voltage is 12 V_{DC} +/- 0.1 V.

Caution: This voltage must be aligned very precisely. When it is too high, it can destroy the inverters, but when it is too low, the backlight will not start up.

8.3 Software Alignments

Put the set in SAM mode (see the "Service Modes, Error Codes and Fault Finding" section). The SAM menu will now appear on the screen. Select ALIGNMENTS and go to one of the sub menus. The alignments are explained below.

Notes:

- All changes must be stored manually.
- If an empty EAROM (permanent memory) is detected, all settings are set to pre-programmed default values.

8.3.1 General

For the next alignments, supply the following test signals via a video generator to the RF input:

- **EU/AP-PAL** models: a PAL B/G TV-signal with a signal strength of at least 1 mV and a frequency of 475.25 MHz
- **US/AP-NTSC** models: an NTSC M/N TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).
- **LATAM** models: an NTSC M or PAL M TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).

Luma Gain
Fixed setting of "1".

IF AFC
Alignment procedure:

1. During the IF AFC-parameter adjustment, one can see OSD feedback on the screen.
2. The OSD feedback can give 4 kinds of messages:
3. The first item ("IN/OUT") informs you whether you are in or out of the AFC-window.
4. The second item ("HIGH/LOW") informs you whether the AFC-frequency is too high or too low.

Table 8-1 AFC

AFC-window	AFC-frequency vs. reference
Out	High
In	High
[In]	[Low]
Out	Low

1. Adjust the IF AFC parameter until the **first** value is within the AFC window (= IN).
2. Next, adjust the IF AFC parameter until the **second** value is LOW.

IF Lprime AFC
Same procedure as described above, but with SECAM L/L' signal source.

Tuner AGC
Measure the DC voltage on pin 1 of the (main) Tuner. You can adjust this voltage by adjusting the TUNER AGC item in the SAM menu. Alignment is correct when the DC voltage is just below 3.5 V.

Blend Intensity
Use this alignment when you replace the microcontroller, NVM, or the EBILD. It aligns the level of transparency of the menu-picture blended into the main-picture. Fixed setting of "16".

8.3.2 2fh ADC Alignment

Only necessary to set, when the A/D convertor or NVM is replaced. Use the default values as mentioned in the table.

Table 8-2 "2fH ADC alignment"

Menu item	Value
Red Gain RGB	106
Blue Gain RGB	112
Green Gain RGB	133
Red Offset RGB	40
Blue Offset RGB	41
Green Offset RGB	43
Red Gain YPbPr *	115
Blue Gain YPbPr *	118
Green Gain YPbPr *	102
Red Offset YPbPr *	59
Blue Offset YPbPr *	56
Green Offset YPbPr *	35
* = only for sets with YPbPr input	

8.3.3 White D Alignment

- Set ACTIVE CONTROL to "Off" (via RC).
- In the TV -> PICTURE user menu set:
  - DYNAMIC CONTRAST to "Off".
  - COLOUR ENHANCEMENT to "Off".
  - COLOUR to "0".
  - CONTRAST to "100".
  - BRIGHTNESS to "43".
- Go to the SAM and select ALIGNMENTS -> WHITE POINT.

Method 1 (with colour analyser):

- Use a 100% white screen as input signal and set the following values:
  - COLOR TEMPERATURE: "Tint to be aligned".
  - WHITEPOINTRED: "127".
  - WHITEPOINTGREEN: "127".
  - WHITEPOINTBLUE: "127".
  - RED BL OFFSET: "7"
  - GREEN BL OFFSET: "7".
- Measure with a calibrated (phosphor- independent) colour analyser in the centre of the screen. Use a contactless analyser (e.g. Minolta CA-210) to align an LCD TV. The colour analyser may not touch the screen surface. Consequently, the measurement needs to be done in a dark environment.
  Note: The colour analyser needs to be calibrated for LCD!
- Adjust, by means of decreasing the value of one or two whitepoints, the correct x,y coordinates (see table "White D alignment values"). Tolerance: dx,dy: ± 0.004.
- Repeat this step for the other Colour Temperatures that need to be aligned.
- When finished press "Store" to store the aligned values to the NVM.

Table 8-3 White D alignment values

Coordinates	Cool	Normal	Warm
X	0.276	0.287	0.314
Y	0.281	0.292	0.320

Method 2 (without colour analyser):

If you do not have a colour analyser, you can use the default values. This is the next best solution. The default values are average values coming from production (statistics).

1. Select a COLOUR TEMPERATURE (e.g. COOL, NORMAL, or WARM).
2. Set the RED, GREEN and BLUE default values according to the values in the "Tint settings" table.
3. When finished press "Store" to store the aligned values to the NVM.

Table 8-4 Tint settings

	Cool	Normal	Warm
White Point R	127	127	127
White Point G	126	123	116
White Point B	112	104	86

8.3.4 Lum. Del.

With this Luminance Delay alignment, you place the luminance information exactly on the chrominance information (brightness is pushed onto the colour). Use a colour bar / grey scale pattern as test signal.

- **Lum. Delay PAL BG:** Apply a PAL BG colour bar / grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position.
  Default value is "**7**".
- **Lum. Delay PAL I:** Apply a PAL I colour bar/grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position.
  Default value is "**9**".
- **Lum. Delay SECAM:** Apply a SECAM colour bar/grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position.
  Default value is "**9**".
- **Lum. Delay Bypass:** apply a NTSC colour bar/greyscale pattern as a test signal. Adjust this value until the transients of the colour and black and white part of the test area are at the same position.
  Default value is "**6**".

8.4 Option Settings

8.4.1 Introduction

The microprocessor communicates with a large number of I^2C ICs in the set. To ensure good communication and to make digital diagnosis possible, the microprocessor has to know which ICs to address. The presence / absence of these specific ICs (or functions) is made known by the option codes.

Notes:

- After changing the option(s), save them with the STORE command.
- The new option setting is only active after the TV is switched "off" and "on" again with the Mains switch (the EAROM is then read again).

8.4.2 Dealer Options

Table 8-5 Dealer option overview

Menu name	**Subjects**	**Options**	**Description**
Personal Options	Picture Mute	Yes	Picture (blue) mute active in case no picture detected
		No	Noise in case of no picture detected
	Virgin Mode	Yes	TV starts up (once) with language selection menu after mains switch "on" for the first time (virgin mode)
		No	TV does not starts up (once) with language selection menu after mains switch "on" for the first time (virgin mode)
	Auto Store Mode (only for EU and AP-PAL/M sets)	None	Autostore mode disabled (not in installation menu)
		PDC-VPS	Autostore mode via ATS (PDC/VPS) enabled
		TXT page	Autostore mode via ACI enabled
		PDC-VPS-TXT	Autostore mode via ACI or ATS enabled
	TXT Preference (only for EU and AP-PAL sets)	TOP	Preference to TOP Teletext
		FLOF	Preference to FLOF Teletext
	DVD door lock (only for sets with integrated DVD)	Yes	To disable the DVD tray opening function
		No	To enable the DVD tray opening function
	AmbiLight Demo (only when Ambi Light option is "on")	Yes	Activation of AmbiLight demo via local "MENU" button possible
		No	Activation of AmbiLight demo via local "MENU" button not possible

8.4.3 Service Options

Select the sub menu's to set the initialisation codes (options) of the set via text menus.

Table 8-6 Service option overview

Menu-item	**Subjects**	**Options**	**Description**
Dual Screen	PIP/Dual Screen	Yes / No	Feature present / not present
	Text/EPG	Yes / No	Feature present / not present
	DS/PIP Tuner	Yes / No	Feature present / not present (only selectable if PIP/Dual Screen option is "on")
Teletext	NexTView type	None	Feature not present
		Textguide only	Feature present, but only as text guide
		Nextview 2c3	Feature present, for countries that support NexTView
Display	Screen (the used display code is also printed on the option code sticker inside the set)	Value "000"	42 inch PDP SDI
		Value "001"	50 inch PDP SDI
		Value "002"	42 inch PDP FHP
		Value "003"	30 inch LCD LPL
		Value "004"	37 inch LCD LPL
		Value "005"	42 inch LCD LPL
		Value "006"	**32 inch LCD Sharp**
		Value "007"	42 inch PDP SDI VGA
		Value "008"	37 inch PDP FHP
Video Repro	Feature box type	1050i/1250i	HD input
		Eagle 1B	"Eagle version 1B" present (Pixel Plus 1)
		Eagle 1C	"Eagle version 1C" present (Pixel Plus 2)
	Lightsensor	Yes / No	Feature present / not present
	3D Comb filter	Yes / No	Only selectable when Columbus is present
	Improved Noise Reduction	Yes / No	Only selectable when Columbus is present
	PixelPlus Version	1	Standard PP: only selectable with Eagle 1C
		2	Improved PP: only selectable with Eagle 1C
	720p	Yes / No	Enable for high resolution displays
Source Selection	EXT3 1Fh (2003)	Yes / No	Not selectable

Menu-item	Subjects	Options	Description
Audio Repro	Acoustic System	FTV Top	Cabinet design (xxPF9986 and xxPF9996 with NXT). See styling 499 in Product Survey.
		Soft Wrap	Cabinet design (xxPF9956 and xxPF9966 standard). See styling 496 in Product Survey.
		Wrap	Cabinet design (xxPF9956 and xxPF9966 standard). See styling 500 in Product Survey.
		FTV2.3	Cabinet design (for future)
	AVL	Yes / No	Enable / disable Automatic Volume Limiter
Miscellaneous	Home Cinema	Yes / No	Model with / without Home Cinema Link (EU only)
	Integrated RC	Yes / No	Control pheripheral equipment via TV IR receiver (EU only)
	Tuner type	UV1316 / TEDE9	Model with Philips tuner / Alps tuner
	P50 DVD menu line	Yes / No	Enable / disable DVD control via user menu with TV RC (EU only)
	Hotel Mode	Yes / No	Enable / disable Hotel Mode
Option no.	Group 1		Group 1 option code overview (see set sticker)
	Group 2		Group 2 option code overview (see set sticker)
	Store Options	<OK>	Store options when changed

8.4.4 Opt. No. (Option numbers)

Select this sub menu to set all options at once (expressed in two long strings of numbers).
An option number (or "option byte") represents a number of different options. When you change these numbers directly, you can set all options very quickly. All options are controlled via eight option numbers.
When the EAROM is replaced, all options will require resetting. To be certain that the factory settings are reproduced exactly, you must set both option number lines. You can find the correct option numbers on a sticker inside the TV set.

Example: The options sticker gives the following option numbers:
- 04368 00005 01066 08707
- 00000 00032 00512 00000

The first line (group 1) indicates hardware options 1 to 4, the second line (group 2) indicates software options 5 to 8.
Every 5-digit number represents 16 bits (so the maximum value will be 65536 if all options are set).
When all the correct options are set, the sum of the decimal values of each Option Byte (OB) will give the option number.
See next table for the option overview.

Table 8-7 Option overview

Byte	Bit (dec. value)	Subject	Options	Settings (in decimal values)	Remarks
1	0 (1)	Video Repro	Feature Box Type	3= Eagle 1B, 4= Eagle 1C, 5= 1050i/1250i	
	1 (2)				
	2 (4)				
	3 (8)	Personal	Ambi Light Demo	0= Off, 8= On	
	4 (16)	Video Repro	Auto Scavem	0= No, 16= Yes	Only selectable for CRT sets.
	5 (32)		Improv. Noise Reduction	0= No, 32= Yes	Fixed to "Yes" in case Columbus is present
	6 (64)		Light Sensor	0= No, 64= Yes	
	7 (128)	n.a.	n.a.		
	8 (256)	Video Repro	Digital Option	0 (No)= Dig. Natural Motion (for PP1) or PixelPlus (for PP2), 256 (Yes)= PixelPlus (for PP1) or PixelPlus2 (for PP2)	This depends on the "Pixel Plus Version" option (see also Byte 1 - bit 14), and gives the info that is visible in the user menu.
	9 (512)		n.a.		
	10 (1024)	Source Selection	1152i	0= Off, 1024= On	
	11 (2048)	Video Repro	n.a.		
	12 (4096)		Signalling Bits	0= No, 4096= Yes	Fixed to: "Yes" in EU and AP-P, "No" for other versions.
	13 (8192)		3D Comb Filter	0= No (2D Comb), 8192= Yes (3D Comb)	
	14 (16384)		PP (Pixel Plus) Version	0= "1", 16384= "2"	Only selectable when "Feature Box" option is "Eagle 1C". See also Byte 1- bit 8 "Digital Option".
	15 (32768)		720p	0= No, 32768= Yes	
2	0 (1)	Audio Repro	n.a.		
	1 (2)		Dolby Pro Logic	0= No, 2= Yes	
	2 (4)		Virtual Rear Speakers	0= No, 4= Yes	Fixed to: "Yes" for sets with Dolby Pro Logic.
	3 (8)		Cordless Rear Speakers	0= No, 8= Yes	Fixed to: "No" for all versions, except for EU.
	4 (16)		Dolby Digital	0= No, 16= Yes	When Dolby Digital is "Yes", the AVL (Byte 8 - bit 6) option must be "No".
	5 (32)		Virtual Dolby	0= No, 32= Yes	Fixed to: "No" in case the "Dolby Pro Logic" option (Byte 2 - Bit 1) unequals "none".
	6 (64)		Sub woofer	0= No Sub woofer present, 64= Sub woofer present.	
	7 (128)				
	8 (256)	Chassis/Region	Chassis	0= EM6, 256= EM5, 512 = EM3	FTx2.x= EM6
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)	Teletext	n.a.		
	13 (8192)		Flash RAM	0= No, 8192= Yes	NexTView type 2C3 and 2 need a Flash RAM.
	14 (16384)		NexTView type	0= None, 16384= Textguide only, 32768= NexTView 2C3, 49152= NexTView 2	Only available for EU.
	15 (32768)				
3	0 (1)	n.a.	n.a.		
	1 (2)	n.a.	n.a.		
	2 (4)	n.a.	n.a.		
	3 (8)	n.a.	n.a.		
	4 (16)	Dual Screen	PIP/Dual Screen	0= No, 16= Yes	
	5 (32)		n.a.		
	6 (64)		TXT/EPG Dual Screen	0= No, 64= Yes.	Fixed to: "Off" for AP-N, US, and LA versions.
	7 (128)		n.a.		
	8 (256)	Display	CRT type (Aspect Ratio)	0= 4:3, 256= 16:9	
	9 (512)		Picture Rotation	0= No, 512= Yes	Only selectable for CRT sets.
	10 (1024)		Monitor	0= No, 1024= Yes	Reserved for Flat TV monitor.
	11 (2048)	Miscellaneous	Integrated Radio	0= No, 2048= Yes	
	12 (4096)		Stand Alone	0= No, 4096= Yes	Reserved for Flat TV monitor.
	13 (8192)		Integrated DVD	0= No, 8192= Yes	
	14 (16384)		Home Cinema	0= No, 16384= Yes	Fixed to: "No" in all versions except for EU.
	15 (32768)		Integrated RC	0= No, 32768= Yes	Fixed to: "No" in all versions except for EU.
4	0 (1)	Dual Screen	DS/PIP (Aux) Tuner	0= Aux Tuner not present, 1= Aux Tuner present	Only selectable in the EU version, provided the "PIP/Dual Screen" option is "Yes".
	1 (2)		DS/PIP (Aux) Tuner Type	0= UV1316, 2= TEDE9	
	2 (4)	Miscellaneous	38.0 (or China) IF	0= No, 4= Yes	Fixed to: "No" in all versions except for AP-P.
	3 (8)		Tuner Type	0= UV1316, 8= TEDE9	
	4 (16)	Teletext	n.a.		
	5 (32)		n.a.		
	6 (64)		n.a.		
	7 (128)		n.a.		
	8 (256)	Miscellaneous	Integrated Dig. Module	0= No, 256= Yes	
	9 (512)		Integrated HDD	0= No, 512= Yes	
	10 (1024)		n.a.		
	11 (2048)		n.a.		
	12 (4096)		Anti Aging	0= No, 4096= Yes	Fixed to: "Yes" for FTV.
	13 (8192)	Personal	DVD Door Lock	0= No, 8192= Yes	
	14 (16384)		n.a.		
	15 (32768)		n.a.		

Byte	Bit (dec. value)	Subject	Options	Settings (in decimal values)	Remarks
5	0 (1)	Personal	n.a.		
	1 (2)		Auto Store Mode	0= None, 2= PDC/VPS, 4= TXT Page, 6= PDC/VPS/TXT Page	Fixed to: "None" in the AP-N and US versions.
	2 (4)				
	3 (8)		2CS Korea	0= BTSC, 8= Korean Stereo	As the MSP can not automatically detect if Korean stereo (2CS) or BTSC is transmitted, this option is needed to tell the MSP what detection should be done.
	4 (16)		Blue (or Picture) Mute	0= No, 16 = Yes	
	5 (32)		n.a.		
	6 (64)		Virgin Mode	0= No, 64= Yes	
	7 (128)	Miscellaneous	Hotel Mode	0= No, 128= Yes	
	8 (256)	Personal	Flex TV Demo	0= No, 256= Yes	
	9 (512)	n.a.	n.a.		
	10 (1024)	Miscellaneous	Dimming Backlight	0= No, 1024= Yes	
	11 (2048)	n.a.	n.a.		
	12 (4096)	Personal	TXT Preference	0= Top, 4096= FLOF	Only available in the EU version.
	13 (8192)	n.a.	n.a.		
	14 (16384)	n.a.	n.a.		
	15 (32768)	n.a.	n.a.		
6	0 (1)	Miscellaneous	P50 DVD Menu Line	0= No, 1= Yes	Fixed to: "No" in all versions except for EU.
	1 (2)		n.a.		
	2 (4)		n.a.		
	3 (8)		n.a.		
	4 (16)	Chassis/Region	Region	0= EU, 16= AP-P, 32= AP-N, 48= US, 64= Latam, 80= Australia	
	5 (32)				
	6 (64)				
	7 (128)				
	8 (256)	Display	Screen	"000" (0)= 42-inch PDP (SDI), "001" (256)= 50-inch PDP (SDI), "002" (512)= 42-inch PDP (FHP), "003" (768)= 30-inch LCD (LPL), "004" (1024)= 37-inch LCD (LPL), "005" (1280)= 42-inch LCD (LPL), "006" (1536)= 32-inch LCD (Sharp), "007" (1792)= 42-inch PDP (SDI) VGA, "008" (2048)= 37-inch PDP (FHP).	Fixed to "0" in case of CRT.
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)				
	13 (8192)				
	14 (16384)				
	15 (32768)				
7	0 (1)	Source Selection	EXT4 1fH	0= No, 1= Yes	
	1 (2)		EXT1 2fH	0= No, 2= Yes	
	2 (4)		n.a.		
	3 (8)		n.a.		
	4 (16)		n.a.		
	5 (32)		EXT3 1fH	0= No, 32= Yes	
	6 (64)		DVI/VGA	0= No, 64= Yes	
	7 (128)		HDMI (Europe)	0= No, 128= Yes	
	8 (256)		AV3 1fH	0= No, 256= Yes	
	9 (512)		AV1 2fH	0= No, 512= Yes	
	10 (1024)		AV2 2fH	0= No, 1024= Yes	
	11 (2048)		n.a.		
	12 (4096)		n.a.		
	13 (8192)		n.a.		
	14 (16384)		n.a.		
	15 (32768)		HDMI (Non- Europe)	0= No, 32768= Yes	
8	0 (1)	Audio Repro	Acoustic System	0= FTV-Top (499), 1= Soft Wrap (496, 498), 2= Wrap (496, 498), 3= FTV2.3 (505), 4= FL9 Monitor (n.a.), 5= FL10 (n.a.), 6= FL11 or FL11-upgr. (380, 382, 406, 425, 426, 534), 7= FL12 (296, 305, 395, 408, 428, 444), 8= FL14 (n.a.), 9= PV02 (462), 10= FL13A (456), 11= Soft Design Line (336, 383), 12= Tech Design Line (419), 14= FL13B (456), 15= Others	Used for setting dynamic audio parameters. Between brackets the styling numbers are mentioned as listed in the quarterly Product Survey.
	1 (2)				
	2 (4)				
	3 (8)				
	4 (16)	n.a.	n.a.		
	5 (32)	n.a.	n.a.		
	6 (64)	Audio Repro	AVL	0= No, 64= Yes	Switch to "No" when Dolby Digital is present.
	7 (128)		1080i Screen	0= 2fH path, 128= 3fH path	
	8 (256)	Display	CRT Size	0= 28", 256= 32", 512= 36" MEC, 768= 29", 1024= 34", 1280= 38", 1536= 28" Mk2, 1792= 36" PH, 2048= 32" MEC, 2304= 32" PH, 2560= 30", 2816= 37", 3072= 42", 3328= 50", 3840= Others	
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)		Anti Moire Filter	0= No, 4096= Yes	Only for CRT
	13 (8192)		Display Type	0= LCD (LPL), 8192= PDP, 16384= CRT, 24576= LCoS, 32768= PTV, 40960= LCD (AUO), 49152= LCD (Sharp)	
	14 (16384)				
	15 (32768)				

9. Circuit Descriptions, Abbreviation List, and IC Data Sheets

Index of this chapter:

9.1 Introduction
9.2 Abbreviation List

Note:
Only **new** (not recently published) circuits are described here. As this chassis does not contain any really new circuits, use the FTL2.2x manual for the circuit descriptions.

9.1 Introduction

This chassis contains, compared to its predecessor, the following **new/changed** features/components:

- **Small Signal Board** (SSB). Small layout changes and new software to support the 720p feature.
- **Dual Ambient Light inverter panels**: To reduce the heat dissipation and improve the efficiency, two separate CCFL inverter panels are introduced in some models.
- **Dimming Backlight** : Feature to improve the contrast of LCD displays. When there is no (or little) white content in the picture, the LCD backlight will be dimmed to make the black look darker. The picture content is measured by the EPLD, which will adapt the PWM signal to the backlight (see also diagrams B19E and B20).

The chassis consists of a full sized SSB, two Power Supplies (Main and Stand-by), and some smaller panels for Audio, I/O, and Control functions. The main functionalities are:

- **LCD power supply**: same as used in the FTL2.2x.
- **SSB**: Core TV functionalities, being TXT/control, video and audio decoding, feature box, video featuring, and sync/geometry control. The SSB is a high tech module (four layer, 2 sides reflow technology, full SMC) with very high component density and full shielding for EMC-reasons. Despite this, it is designed in such a way, that repair on component level is possible. To achieve this, attention was paid to:
  - Clearance around surface mounted ICs (for replacing).
  - Detailed diagnostics and fault finding is possible via ComPair.
  - Software upgrading (only for main software) is possible via ComPair.

9.2 Abbreviation List

1080i	1080 visible lines, interlaced
1080p	1080 visible lines, progressive scan
2DNR	Spatial (2D) Noise Reduction
3DNR	Temporal (3D) Noise Reduction
AARA	Automatic Aspect Ratio Adaptation: algorithm that adapts aspect ratio to remove horizontal black bars; keeping up the original aspect ratio
ACI	Automatic Channel Installation: algorithm that installs TV sets directly from cable network by means of a predefined TXT page
ADC	Analogue to Digital Converter
AFC	Automatic Frequency Control: control signal used to tune to the correct frequency
AGC	Automatic Gain Control: algorithm that controls the video input of the feature-box
AM	Amplitude Modulation
ANR	Automatic Noise Reduction: one of the algorithms of Auto TV
AR	Aspect Ratio: 4 by 3 or 16 by 9
Artistic	See OTC 2.5: main processor
ASF	Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars but without throwing away video information
ATV	See Auto TV
AUDIO_C	Audio Centre
AUDIO_L	Audio Left
AUDIO_R	Audio Right
AUDIO_SL	Audio Surround Left
AUDIO-SR	Audio surround right
AUDIO_SW	Audio Sub woofer
Auto TV	A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz. B= VHF-band, G= UHF-band
B-SC1-IN	Blue SCART1 in
B-SC2-IN	Blue SCART2 in
B-TXT	Blue teletext
CL	Constant Level: audio output to connect with an external amplifier
ComPair	Computer aided rePair
CSM	Customer Service Mode
CTI	Colour Transient Improvement: manipulates steepness of chroma transients
CVBS	Composite Video Blanking and Synchronisation
CVBS-TER	CVBS terrestrial
COLUMBUS	COLour LUMinance Baseband Universal Subsystem. IC performing noise reduction and 2D/3D comb filtering
DAC	Digital to Analogue Converter
DBE	Dynamic Bass Enhancement: extra low frequency amplification
DDC	Display Data Channel; is a part of the "Plug and Play" feature
DFU	Direction For Use: description for the end user
D/K	Monochrome TV system. Sound carrier distance is 6.5 MHz. D= VHF-band, K= UHF-band

DNR	Digital Noise Reduction: noise reduction feature of the box
DPL	Dolby ProLogic
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for dealers to enter e.g. service mode
DVD	Digital Versatile Disc
DVI(-d)(-i)	Digital Visual Interface (d= digital only) (i= integrated); a digital video interface to a display, designed to replace the analogue YPbPr or RGB interface
Eagle	Feature box IC performing peaking, zooming and sub pixel LTI in both horizontal and vertical direction, CTI and other colour features
EDID	Extended Display Identification Data (VESA standard)
EEPROM	Electrically Erasable and Programmable Read Only Memory
EHT	Extra High Tension
EPG	Electronic Program Guide: system used by broadcasters to transmit TV guide information (= NexTView)
EPLD	Erasable Programmable Logic Device
EU	EUrope
EXT	External (source), entering the set via SCART or via cinches
FALCONIC	SAA4992H, Feature Box IC performing Digital Natural Motion, 3DNR, and vertical zoom and vertical peaking
FBL	Fast Blanking: DC signal accompanying RGB signals
FBL-PIP	The fast blanking signal for PIP
FBL-TXT	The fast blanking signal for TXT. It has a higher priority than FBL-PIP
FBX	Feature Box: part of small signal / separate module which contains 100 Hz processing, extra featuring and AutoTV algorithms (FBX6= based on PICNIC, FBX7= based on PICNIC and Eagle)
FDS	Full Dual Screen
FEM	Falconic Embedded Memory; IC (SAA4998H) that is the successor of the SAA4993H with jagged line removal and embedded memory
FHP	Fujitsu Hitachi Plasma display Ltd.
FLOF	Full Level One Features, TXT standard
FLASH	Flash memory
FM	Field Memory or Frequency Modulation
G-TXT	Green teletext
HA	Horizontal Acquisition: horizontal sync pulse coming out of the HIP
HD at HOME	A signal from the OTC, to switch the HOP to the Pixel Plus standard (75 Hz frame)
HIP	High-end video Input Processor (TDA9320): video and chroma decoder of EM5E
HP	Head phone
I	Monochrome TV system. Sound carrier distance is 6.0 MHz. VHF- and UHF-band
I/O	Input/Output
I^2C	Inter IC bus (also called IIC)
IF	Intermediate Frequency
Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in "pairs", causing line flicker
Last Status	The settings last chosen by the customer, read, and stored in RAM or in the NVM. They are called at start-up of the set to configure it according the customers wishes
LCD	Liquid Crystal Display
LPL	LG-Philips LCD (supplier)
LED	Light Emitting Diode
L/L'	Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I
LNA	Low Noise Adapter
LORE	LOcal REgression based noise reduction
LSP	Large signal panel
LVDS	Low Voltage Differential Signalling; Data transmission system for high speed and low EMI communication
M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz. M= 525 lines @ 60 Hz, N= 625 lines @ 50 Hz
MUTE	Mute-Line
NC	Not Connected
NICAM	Near Instantaneously Companded Audio Multiplexing; This is a digital sound system, mainly used in Europe
NTSC	National Television Standard Committee; Colour system mainly used in North America and Japan. Colour carrier NTSC M/N= 3.579545 MHz, NTSC 4.43= 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
NVM	Non Volatile Memory: IC containing TV related data e.g. alignments
O/C	Open Circuit
OSD	On Screen Display
OTC	On screen display Teletext and Control; also named Artistic (SAA5800)
P50	Project 50 communication: protocol between TV and peripherals
PAL	Phase Alternating Line; Colour system mainly used in West Europe (colour carrier= 4.433619 MHz) and South America (colour carrier PAL M= 3.575612 MHz and PAL N= 3.582056 MHz)
PCB	Printed Circuit Board
PDP	Plasma Display Panel
PFC	Power Factor Corrector (or Pre-conditioner)
PICNIC	Peripheral Integrated Combined Network IC (SAA4978): main IC for 100 Hz featuring and feature processing
PIP	Picture In Picture
PLL	Phase Locked Loop; Used for e.g. FST tuning systems. The customer can directly provide the desired frequency
POR	Power On Reset; Signal to reset the µP
Progressive Scan	Scan mode where all scan lines are displayed in one frame at the same time, creating a double vertical resolution.
PSU	Power Supply Unit
PWB	Printed Wiring Board
RAM	Random Access Memory
R-TXT	Red teletext
RC	Remote Control
RC5 / RC6	Signal protocol from the remote control receiver
RESET	Reset signal

RGB	Red, Green, and Blue colour space; The primary colour signals for TV. By mixing levels of R, G, and B, all colours (Y/C) are reproduced
RGBHV	Red, Green, Blue, Horizontal sync, and Vertical sync
ROM	Read Only Memory
SAM	Service Alignment Mode
S/C	Short Circuit
SCL-F	Clock signal on fast I^{2}C bus
SD	Standard Definition
SDA-F	Data signal on fast I^{2}C bus
SDI	Samsung Display Industry (supplier)
SECAM	SÉquence Couleur Avec Mémoire; Colour system mainly used in France and East Europe. The chroma is FM modulated and the R-Y and B-Y signals are transmitted line sequential. Colour carriers= 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMD	Surface Mounted Device
SMPS	Switched Mode Power Supply
SNERT	Synchronous No parity Eight bit Reception and Transmit
SSB	Small Signal Board
STBY	Stand-by
SW	Sub woofer
SVGA	800x600 (4:3)
SVHS	Super Video Home System
TMDS	Transition Minimised Differential Signalling
TOP	Table Of Pages; TXT standard
TXT	Teletext
uP	Microprocessor
UV	Colour difference signals
UVSH	UHF, VHF, S-, and Hyper-band
VA	Vertical Acquisition
V-a	Addressing voltage for the plasma display
VDS	Virtual Dolby Surround
VESA	Video Electronics Standards Association
VFB	Vertical Flyback Pulse: vertical sync pulse coming from the Feature Box
VGA	Video Graphics Array; 640x480 (4:3)
VL	Variable Level out: processed audio output towards external amplifier
V-ra	Setting voltage for V_a
V-rs	Setting voltage for V_s
V-s	Sustain voltage for the plasma display
WSS	Wide Screen Signalling; used by broadcasters to transmit e.g. PALPLUS and 16:9 Aspect Ratio
WXGA	Wide eXtended Graphics Array; 1280x768 (15:9) or 1366x768 (16:9)
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
XGA	Extended Graphics Array; 1024x768 (4:3)
XTAL	Quartz crystal
Y	Luminance signal
Y100	Y from Feature Box
YPbPr	This is a scaled version of the YUV colour space. Y= Luminance, Pb/Pr= Colour difference signals B-Y and R-Y, other amplitudes w.r.t. to YUV
Y-OUT	Luminance-signal to HOP IC
YUV	Colour space used by the NTSC and PAL video systems. Y is the luminance and U/V are the colour difference signals

9.3 IC Data Sheets

See FTL2.2 manual.

10. Spare Parts List

Set Level

Various

1004▲	8204 000 78291	LCD LQ315T3LZ2X
1088	3104 328 39552	Ambilight Inverter assy
1089	3104 328 39552	Ambilight Inverter assy
1112	3104 328 32471	Mains Switch / LED assy
1114	3104 328 35721	Control assy
1116	3104 328 32461	Side I/O assy
1175	2722 171 00251	Ambilight assy
1176	2722 171 00252	Ambilight assy
8250	3104 311 08901	Cable 31P/230/30P
8302	3104 311 04721	Cable 7P/680/7P
8310	3104 311 07061	Cable 4P/280/4P
8314	3104 311 08531	Cable 10P/820/10P
8315	3104 311 08531	Cable 10P/820/10P
8318	3104 311 06841	Cable 6P/820/6P
8504	3104 311 08281	Cable 4P/480/4P
8505	3104 311 08431	Cable 3P/480/3P
8506	3104 311 08361	Cable 2P3/400/2P3
8507▲	3104 311 08381	Cable 4P/400/4P
8508	3104 311 08471	Cable 4p/680/4p
8509	3104 311 08311	Cable 3P/480/4P
8548	3104 311 10351	Cable 3P/680/3P
8735	3104 311 08601	Cable 2P3/820/2xPosi
8736	3104 311 09471	Cable 2P/1600/2P
8737	3104 311 08251	Wire ring/180/POSI 4.8

LCD Supply [A]

Various

1007▲	4822 071 55002	Fuse T5A 250V
1304	2422 025 10647	Connector 4p m
1305	4822 267 10735	Connector 3p
1306▲	2422 025 16374	Connector 2p m
1307	2422 025 10647	Connector 4p m
1308▲	4822 265 20723	Connector 2p
1309	2422 025 11143	Connector 3p m
1400▲	4822 253 50145	Fuse 3.15A T
1402	4822 252 60151	Surge protect
1410	4822 265 11253	Fuse holder
1411	4822 265 11253	Fuse holder
1450▲	2422 132 07411	Relay 1p 5V 5A
1M02	2422 025 11244	Connector 7p m

⊣⊢

2000▲	2252 811 95022	1.5nF 20% 250V
2002	4822 124 11767	470μF 20% 25V
2003	4822 124 80061	1000μF 20% 25V
2007	4822 126 14583	470nF 10% 16V 0805
2008	4822 126 14583	470nF 10% 16V 0805
2009	2238 867 18101	100pF 1% 50V 0603
2010	4822 124 40207	100μF 20% 25V
2012	4822 126 14138	680pF 10% 2kV
2013	4822 126 14138	680pF 10% 2kV
2014▲	4822 126 13451	2.2nF 10% 2kV
2015	5322 126 11583	10nF 10% 50V 0603
2016	2238 586 59812	100nF 20% 50V 0603
2019	5322 126 11583	10nF 10% 50V 0603
2020	4822 124 12285	2200μF 20% 16V
2021	4822 124 12285	2200μF 20% 16V
2022	2020 021 00039	1800μF 20% 35V
2023	4822 126 14583	470nF 10% 16V 0805
2024	2020 552 96326	220nF 10% 16V
2025	2020 552 96683	220nF 10% 50V
2026	4822 126 14238	2.2nF 50V 0603
2028	5322 126 11578	1nF 10% 50V 0603
2029	5322 126 11578	1nF 10% 50V 0603
2031	5322 126 11583	10nF 10% 50V 0603
2033	2020 552 96683	220nF 10% 50V
2034	2238 867 18101	100pF 1% 50V 0603
2035	2238 867 18101	100pF 1% 50V 0603
2038	2020 021 00039	1800μF 20% 35V
2039	4822 126 14583	470nF 10% 16V 0805
2040	4822 126 14249	560pF 10% 50V 0603
2041	2020 552 96683	220nF 10% 50V
2042	2020 552 96683	220nF 10% 50V
2043	2020 552 96683	220nF 10% 50V
2044	5322 126 11578	1nF 10% 50V 0603
2045	5322 126 11578	1nF 10% 50V 0603
2046	3198 017 34730	47nF 16V 0603
2047	5322 126 11583	10nF 10% 50V 0603
2048	5322 126 11578	1nF 10% 50V 0603
2050	5322 126 11578	1nF 10% 50V 0603
2051	2020 552 96683	220nF 10% 50V
2052	2020 552 96683	220nF 10% 50V
2053	2020 552 96683	220nF 10% 50V
2060	4822 126 14238	2.2nF 50V 0603
2061	4822 126 14238	2.2nF 50V 0603
2062	4822 126 14238	2.2nF 50V 0603
2063	4822 126 13881	470pF 5% 50V
2064	4822 126 13881	470pF 5% 50V
2065	4822 126 14238	2.2nF 50V 0603
2071	5322 126 11578	1nF 10% 50V 0603
2072	5322 126 11578	1nF 10% 50V 0603
2077	4822 126 14238	2.2nF 50V 0603
2290	5322 126 11583	10nF 10% 50V 0603
2291	4822 126 13881	470pF 5% 50V
2292	4822 124 12417	2200μF 20% 25V
2293	4822 126 13881	470pF 5% 50V
2294	4822 124 12417	2200μF 20% 25V
2400▲	2222 338 22474	470nF 20% 275V
2407▲	2252 811 95017	470pF 10% 250V
2816	2020 024 00001	330μF 20% 400V
2816	2020 024 90749	330μF 20% 400V

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3000▲	4822 052 10478	4.7Ω 5% 0.33W
3001	4822 051 30101	100Ω 5% 0.062W
3002	4822 117 12925	47kΩ 1% 0.063W 0603
3003	4822 117 13632	100kΩ 1% 0603 0.62W
3004	4822 051 30273	27kΩ 5% 0.062W
3005	4822 051 30333	33kΩ 5% 0.062W
3006	4822 051 30103	10kΩ 5% 0.062W
3007	4822 051 30103	10kΩ 5% 0.062W
3008	4822 051 30331	330Ω 5% 0.062W
3009	4822 051 30332	3.3Ω 5% 0.062W
3010	4822 051 30471	47Ω 5% 0.062W
3011	4822 051 30471	47Ω 5% 0.062W
3012	4822 051 30153	15kΩ 5% 0.062W
3013	4822 051 30103	10kΩ 5% 0.062W
3014▲	4822 052 10101	100Ω 5% 0.33W
3015▲	4822 052 10479	47Ω 5% 0.33W
3016	4822 051 30332	3.3Ω 5% 0.062W
3017▲	4822 052 10101	100Ω 5% 0.33W
3018▲	4822 052 10479	47Ω 5% 0.33W
3019	4822 051 30332	3.3Ω 5% 0.062W
3020	4822 051 30332	3.3Ω 5% 0.062W
3021	4822 117 12971	15Ω 5% 0603 0.62W
3022	4822 051 30681	680Ω 5% 0.062W
3023	4822 051 30153	15kΩ 5% 0.062W
3025	3198 021 31820	1.8kΩ 5% 0.062W 0603
3026	2120 368 90118	Potm. lin. 470Ω hor.
3027	4822 117 13632	100kΩ 1% 0603 0.62W
3028	4822 051 30332	3.3Ω 5% 0.062W
3029	4822 051 30332	3.3Ω 5% 0.062W
3030	4822 051 30183	18kΩ 5% 0.062W
3031	4822 051 30103	10kΩ 5% 0.062W
3032	4822 051 30103	10kΩ 5% 0.062W
3032	4822 051 30223	22kΩ 5% 0.062W
3033▲	4822 052 11108	1Ω 5% 0.5W
3034	4822 051 30102	1kΩ 5% 0.062W
3035	4822 051 30332	3.3Ω 5% 0.062W
3037	4822 051 30153	15kΩ 5% 0.062W
3040	3198 021 38220	8.2kΩ 5% 0.062W 0603
3041	4822 051 30333	33kΩ 5% 0.062W
3043	4822 051 30109	10Ω 5% 0.062W
3045	4822 117 12971	15Ω 5% 0603 0.62W
3046	4822 117 12971	15Ω 5% 0603 0.62W
3047	4822 051 30479	47Ω 5% 0.062W
3048	4822 051 30272	2.7kΩ 5% 0.062W
3050	4822 050 28204	820kΩ 1% 0.6W
3052	2322 704 67502	7.5kΩ 1% 0.5W
3053	4822 050 26804	680kΩ 1% 0.6W
3055	4822 051 30221	220Ω 5% 0.062W
3056	4822 117 12968	820Ω 5% 0.62W
3057	4822 051 30221	220Ω 5% 0.062W
3058	4822 053 20565	5.6MΩ 5% 0.25W
3061	4822 051 30683	68kΩ 5% 0.062W
3064	4822 051 30103	10kΩ 5% 0.062W
3065	4822 117 13632	100kΩ 1% 0603 0.62W
3066	4822 051 30103	10kΩ 5% 0.062W
3067	4822 051 30101	100Ω 5% 0.062W
3068	4822 051 30222	2.2kΩ 5% 0.062W
3070	4822 051 30102	1kΩ 5% 0.062W
3071	4822 051 30103	10kΩ 5% 0.062W
3075	4822 051 30102	1kΩ 5% 0.062W
3089	4822 051 30103	10kΩ 5% 0.062W
3100	4822 051 30109	10Ω 5% 0.062W
3292	4822 051 30561	560Ω 5% 0.062W
3400▲	2122 550 00158	VDR 1mA 612V
3401▲	4822 053 21475	4.7MΩ 5% 0.5W
3402▲	4822 053 21475	4.7MΩ 5% 0.5W
3403▲	4822 053 21475	4.7MΩ 5% 0.5W
3404	4822 116 83872	220Ω 5% 0.5W
3999	4822 051 30682	6.8Ω 5% 0.062W

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5001	2422 531 02444	Transf. S13932-04Y
5002▲	3104 308 21231	Transf. 2652.0001A
5005	4822 526 10704	Bead 50 Ω at 100MHz
5007	4822 526 10704	Bead 50 Ω at 100MHz
5008	4822 526 10704	Bead 50 Ω at 100MHz
5009	4822 157 11411	Bead 80Ω at 100MHz
5010	4822 157 11411	Bead 80Ω at 100MHz
5013	4822 526 10704	Bead 50 Ω at 100MHz
5015	4822 157 11411	Bead 80Ω at 100MHz
5016	4822 157 11411	Bead 80Ω at 100MHz
5017	4822 526 10704	Bead 50 Ω at 100MHz
5025	4822 526 10704	Bead 50 Ω at 100MHz
5026	4822 526 10704	Bead 50 Ω at 100MHz
5027	4822 526 10704	Bead 50 Ω at 100MHz
5028	4822 526 10704	Bead 50 Ω at 100MHz
5040	4822 157 11411	Bead 80Ω at 100MHz
5291	2422 536 00776	33μH 10%
5292	2422 536 00776	33μH 10%
5293	2422 536 00776	33μH 10%
5403	3104 308 21201	Line filter DTH40383H65

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6002	4822 130 11397	BAS316
6003	4822 130 11397	BAS316
6004	4822 130 80622	BAT54
6005	4822 130 80622	BAT54
6006	4822 130 11397	BAS316
6007	4822 130 11397	BAS316
6008	4822 130 11397	BAS316
6009	4822 130 11152	UDZ18B
6010	4822 130 11397	BAS316
6011	4822 130 11397	BAS316
6012	9322 208 80685	BZG05C15
6013	9322 208 80685	BZG05C15
6014	9340 548 67115	PDZ22B
6015	4822 130 11397	BAS316
6017	4822 130 11397	BAS316
6020	4822 130 11397	BAS316
6021	9322 206 26687	STPS20H100CT
6022	4822 130 11148	UDZ4.7B
6023	4822 130 11397	BAS316
6025	9322 206 26687	STPS20H100CT
6027	4822 130 11397	BAS316
6028	4822 130 11397	BAS316
6044	9322 207 11687	STPS20L45CT
6045	9322 207 11687	STPS20L45CT
6051	4822 130 11397	BAS316
6077	9322 202 55685	BYG22D
6078	9322 202 55685	BYG22D
6079	9322 202 55685	BYG22D
6080	9322 202 55685	BYG22D
6081	9340 548 67115	PDZ22B
6291	4822 130 11572	STPS8H100F
6293	4822 130 11572	STPS8H100F
6460	4822 130 11397	BAS316
6461	4822 130 11397	BAS316
6506▲	4822 130 83147	DF06M
6807▲	9322 199 74682	GBJ6J-B15

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7001	9322 108 21682	MC34067P
7002▲	9322 149 04682	TCET1102
7004	3198 010 42310	BC847BW
7005	9322 192 18687	STP15NK50ZFP
7005	9322 205 26687	FQPF18N50V2
7006	9322 192 18687	STP15NK50ZFP
7006	9322 205 26687	FQPF18N50V2
7007	3198 010 42320	BC857BW
7008	3198 010 42320	BC857BW
7009	3198 010 42320	BC857BW
7010	9322 192 16685	TS2431AI
7017	3198 010 42320	BC857BW
7018	3198 010 42310	BC847BW
7030	3198 010 42310	BC847BW

Ambi Light [AL]

Various

0615	3104 317 09401	SW (see Prod. Survey)
1010	2422 086 00657	Fuse 3A 125V F SMD
1050	2422 543 01431	Xtal 20MHz 16pF
1M08	2422 025 09406	Connector 4p m
1M10	2422 025 09406	Connector 4p m
1M11	2422 025 19068	Connector 11p m
1M12	2422 025 19069	Connector 3p m
1M48	2422 025 10768	Connector 3p m
1M49	2422 025 18884	Connector 4p m

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2001	2020 012 00018	1000µF 20% 16V
2002	2238 586 59812	100nF 20% 50V 0603
2003	2020 552 96618	1nF 10% 50V 0402
2004	2020 552 96618	1nF 10% 50V 0402
2005	3198 034 01590	15pF 1% 50V 0402
2006	3198 034 01590	15pF 1% 50V 0402

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3003	4822 117 13596	220Ω 5% 0.01W 0402
3004	4822 051 20471	470Ω 5% 0.1W
3005	4822 051 20561	560Ω 5% 0.1W
3006	2322 762 60102	1kΩ 5% 2512
3007	2322 762 60102	1kΩ 5% 2512
3008	4822 051 20471	470Ω 5% 0.1W
3009	4822 051 20561	560Ω 5% 0.1W
3010	2322 762 60102	1kΩ 5% 2512
3011	2322 762 60102	1kΩ 5% 2512
3012	4822 051 20471	470Ω 5% 0.1W
3013	4822 051 20561	560Ω 5% 0.1W
3014	2322 762 60102	1kΩ 5% 2512
3015	2322 762 60102	1kΩ 5% 2512
3016	3198 031 04720	4.7kΩ 5% 0402
3017	3198 031 04720	4.7kΩ 5% 0402
3018	3198 031 04720	4.7kΩ 5% 0402
3019	3198 031 04720	4.7kΩ 5% 0402
3020	3198 031 04720	4.7kΩ 5% 0402
3022	4822 117 13545	100Ω 1% 0402
3023	4822 117 13545	100Ω 1% 0402
3024	3198 031 04720	4.7kΩ 5% 0402
3025	3198 031 04720	4.7kΩ 5% 0402
3028	4822 117 13606	10kΩ 5% 0.01W 0402
3029	3198 031 04720	4.7kΩ 5% 0402
3030	3198 031 04720	4.7kΩ 5% 0402
3031	3198 031 04720	4.7kΩ 5% 0402
3042	4822 053 20105	1MΩ 5% 0.25W
3999	4822 051 30103	10kΩ 5% 0.062W

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5002	2422 536 00923	22µH 10% LHL10
5007	2422 536 00923	22µH 10% LHL10
5008	2422 536 00923	22µH 10% LHL10
5014	3104 308 21271	Transf. BD21416-00
5015	3104 308 21271	Transf. BD21416-00
5016	3104 308 21271	Transf. BD21416-00

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6000	4822 130 11397	BAS316
6001	4822 130 11397	BAS316
6002	4822 130 11397	BAS316
6003	4822 130 11397	BAS316
6004	4822 130 11397	BAS316
6005	4822 130 11397	BAS316
6006	4822 130 11152	UDZ18B
6007	4822 130 11152	UDZ18B
6008	4822 130 11152	UDZ18B
6009	4822 130 11152	UDZ18B
6010	4822 130 11152	UDZ18B
6011	4822 130 11152	UDZ18B

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7001	9352 711 46118	P87LPC760BDH
7002	9322 202 58668	LD1117DT50
7009	3198 010 42310	BC847BW
7010	3198 010 42310	BC847BW
7011	3198 010 42310	BC847BW
7015	9322 214 20668	SI4946EY
7016	9322 214 20668	SI4946EY
7017	9322 214 20668	SI4946EY
7018	3198 010 42310	BC847BW
7019	3198 010 42310	BC847BW
7020	3198 010 42310	BC847BW

Small Signal Board [B]

Various

0601	3104 317 09961	SW (see Prod. Survey)
0602	3104 337 00141	SW (see Prod. Survey)
0603	3104 317 06592	SW (see Prod. Survey)
0605	3104 317 47621	SW (see Prod. Survey)
1000	2422 086 11092	Fuse 500mA 50V F SMD
1001	2422 543 01497	Xtal 6Mhz 20pF
1003	2422 025 14911	Socket Euro 21p f
1026	3104 328 29591	SCART 3 assy
1305	2422 543 01488	Xtal 4.433619Mhz 20pF
1308	2422 543 01486	Xtal 3.579545Mhz 16pF
1404	2422 127 00543	Switch 1p 2pos
1407	2422 549 00458	Filter 5M5/5M74
1408	2422 549 44372	SAW 38.9MHz K3953L
1409	2422 549 44369	SAW 38.9MHz K9656L
1703	2422 540 00002	Resonator CSTCE*G52
1A01	2422 543 01059	Resonator 18MHz 12p
1D01	2422 033 00515	Socket DVI-I 29p f
1E02	2422 025 17274	Connector 10p m
1E04	2422 025 18738	Connector 3p m
1G50	2422 025 18427	Connector 31p f
1I01	2422 025 18133	Socket SCART
1I04	2422 025 18133	Socket SCART
1I05	2422 026 05539	Socket Cinch 2p f WhRd
1I06	2422 026 05527	Socket Cinch 2p f
1I07	2422 026 05054	Socket Cinch 2p f WhRd
1I53	2422 549 45325	Bead 67Ω at 100MHz
1I56	2422 549 45325	Bead 67Ω at 100MHz
1I57	2422 549 45325	Bead 67Ω at 100MHz
1I59	2422 549 45325	Bead 67Ω at 100MHz
1I79▲	2422 086 00623	Fuse 3A T 125V
1M01	2422 025 10768	Connector 3p m
1M03	2422 025 10771	Connector 10p m
1M07	4822 267 10637	Connector 5p
1M15	4822 267 10748	Connector 3p
1M17	2422 025 17765	Connector 7p m
1M20	2422 025 10772	Connector 12p m
1M36	2422 025 10655	Connector 11p m
1M37	2422 025 10655	Connector 11p m
1M46	2422 025 10655	Connector 11p m
1M51	2422 025 18884	Connector 4p m
1M52	2422 025 10769	Connector 9p m
1T01	3139 147 22161	Tuner UV1318S/A I H N-3
1U01▲	2422 086 11112	Fuse 1A T 125V
8220	3104 311 08631	Cable12P/480/12P
8303	3104 311 06511	Cable 10p/280/10p
8307	3104 311 05691	Cable 5p/100/5p
8308	3104 311 06951	Cable 2P3/180/2P
8317	3104 311 07871	Cable 7P/180/7P
8336▲	3104 311 07451	Cable 11P/220/11P
8337	3104 311 07451	Cable 11P/220/11P
8346	3104 311 06991	Cable 11P/280/11P
8349	3104 311 10341	Cable 4P/400/4P
8352	3104 311 07381	Cable 9P/220/9P

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2002	3198 034 02790	47pF 1% 50V 0402
2003	2238 780 15654	220nF 10% 16V 0805
2004	2238 780 15654	220nF 10% 16V 0805
2005	2238 586 59812	100nF 20% 50V 0603
2006	2238 586 59812	100nF 20% 50V 0603
2007	2238 586 59812	100nF 20% 50V 0603
2008	2238 586 59812	100nF 20% 50V 0603
2013	2020 021 91557	100µF 20% 16V
2016	4822 124 12095	100µF 20% 16V
2017	2238 586 59812	100nF 20% 50V 0603
2018	4822 126 14324	33pF 5% 50V 0402
2019	2238 586 59812	100nF 20% 50V 0603
2020	3198 035 02210	220pF 5% 50V 0402
2022	2238 586 59812	100nF 20% 50V 0603
2023	2238 586 59812	100nF 20% 50V 0603
2024	2238 586 59812	100nF 20% 50V 0603
2025	2238 586 59812	100nF 20% 50V 0603
2026	2238 586 59812	100nF 20% 50V 0603
2027	2238 586 59812	100nF 20% 50V 0603
2028	2238 586 59812	100nF 20% 50V 0603
2029	2238 586 59812	100nF 20% 50V 0603
2031	2238 586 59812	100nF 20% 50V 0603
2033	2238 869 15829	82pF 5% 50V 0402
2034	2238 869 15829	82pF 5% 50V 0402
2035	2238 869 15829	82pF 5% 50V 0402
2036	2238 869 15829	82pF 5% 50V 0402
2037	2238 869 15829	82pF 5% 50V 0402
2038	2238 586 59812	100nF 20% 50V 0603
2039	2238 586 59812	100nF 20% 50V 0603
2040	2238 586 59812	100nF 20% 50V 0603
2063	2238 586 59812	100nF 20% 50V 0603
2067	2238 586 59812	100nF 20% 50V 0603
2072	2238 586 59812	100nF 20% 50V 0603
2073	3198 017 44740	470nF 10V 0603
2074	2238 586 59812	100nF 20% 50V 0603
2075	2238 586 59812	100nF 20% 50V 0603
2305	2238 586 59812	100nF 20% 50V 0603
2316	2238 586 59812	100nF 20% 50V 0603
2322	2238 586 59812	100nF 20% 50V 0603
2324	5322 126 11583	10nF 10% 50V 0603
2350	2238 586 59812	100nF 20% 50V 0603
2351	2238 586 59812	100nF 20% 50V 0603
2352	2238 586 59812	100nF 20% 50V 0603
2356	2238 586 59812	100nF 20% 50V 0603
2357	2238 586 59812	100nF 20% 50V 0603
2358	3198 035 03320	3.3nF 5% 50V 0402
2359	3198 034 01590	15pF 1% 50V 0402
2360	3198 034 01580	1.5pF 1% 50V 0402
2361	3198 034 01280	1.2pF 1% 50V 0402
2362	2238 869 15109	10pF 5% 50V 0402
2365	2238 586 59812	100nF 20% 50V 0603
2366	2238 586 59812	100nF 20% 50V 0603
2367	2238 586 59812	100nF 20% 50V 0603
2368	2238 586 59812	100nF 20% 50V 0603
2369	2238 586 59812	100nF 20% 50V 0603
2370	2238 586 59812	100nF 20% 50V 0603
2371	3198 035 14720	4.7nF 5% 25V 0402
2372	2022 552 05679	1µF 10% 16V 0805
2373	2238 586 59812	100nF 20% 50V 0603
2374	2022 552 05679	1µF 10% 16V 0805
2375	2238 787 15641	22nF 5% 16V 0402
2376	2238 586 59812	100nF 20% 50V 0603
2377	2020 021 91557	100µF 20% 16V
2378	2238 586 59812	100nF 20% 50V 0603
2384	2238 586 59812	100nF 20% 50V 0603
2387	2022 552 05679	1µF 10% 16V 0805
2391	2238 586 59812	100nF 20% 50V 0603
2392	2022 552 05679	1µF 10% 16V 0805
2394	2022 552 05679	1µF 10% 16V 0805
2403	2238 586 59812	100nF 20% 50V 0603
2404	2022 552 05679	1µF 10% 16V 0805
2405	3198 035 14720	4.7nF 5% 25V 0402
2406	4822 117 13605	Jumper 0402
2409	2022 552 05679	1µF 10% 16V 0805
2410	2020 021 91557	100µF 20% 16V
2411	2238 586 59812	100nF 20% 50V 0603
2412	3198 035 14720	4.7nF 5% 25V 0402
2414	2020 021 91557	100µF 20% 16V
2415	2238 586 59812	100nF 20% 50V 0603
2416	2022 552 05679	1µF 10% 16V 0805
2417	4822 126 14583	470nF 10% 16V 0805
2418	3198 034 05680	5.6pF 1% 50V 0402
2425	2020 021 91557	100µF 20% 16V
2430	4822 126 14324	33pF 5% 50V 0402
2432	2238 586 59812	100nF 20% 50V 0603
2433	2238 586 59812	100nF 20% 50V 0603
2434	2238 586 59812	100nF 20% 50V 0603
2435	2020 552 96618	1nF 10% 50V 0402
2436	2022 552 05679	1µF 10% 16V 0805
2500	2022 552 05679	1µF 10% 16V 0805
2501	2020 552 94427	100pF 5% 50V
2502	2022 552 05679	1µF 10% 16V 0805
2503	2020 552 94427	100pF 5% 50V
2504	2022 552 05679	1µF 10% 16V 0805
2505	2022 552 05679	1µF 10% 16V 0805
2506	2238 586 59812	100nF 20% 50V 0603
2507	5322 126 11578	1nF 10% 50V 0603
2508	2022 552 05679	1µF 10% 16V 0805
2509	2238 586 59812	100nF 20% 50V 0603
2510	4822 126 14241	330pF 0603 50V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2238 586 59812	100nF 20% 50V 0603
2515	2022 552 05679	1µF 10% 16V 0805
2516	2022 552 05679	1µF 10% 16V 0805
2517	2022 552 05679	1µF 10% 16V 0805
2707	3198 034 02790	47pF 1% 50V 0402
2709	2238 586 59812	100nF 20% 50V 0603
2710	2238 586 59812	100nF 20% 50V 0603
2711	2238 586 59812	100nF 20% 50V 0603
2712	2238 586 59812	100nF 20% 50V 0603
2716	2238 586 59812	100nF 20% 50V 0603
2717	2238 586 59812	100nF 20% 50V 0603
2721	2238 869 15101	100pF 5% 50V 0402
2722	2238 869 15101	100pF 5% 50V 0402
2723	2238 586 59812	100nF 20% 50V 0603
2725	2238 586 59812	100nF 20% 50V 0603
2726	2238 586 59812	100nF 20% 50V 0603
2727	2238 586 59812	100nF 20% 50V 0603
2728	2020 021 91854	10µF 20% 16V
2729	2238 586 59812	100nF 20% 50V 0603
2730	2020 021 91557	100µF 20% 16V

2731	2238 586 59812	100nF 20% 50V 0603
2732	2020 552 96618	1nF 10% 50V 0402
2733	2238 586 59812	100nF 20% 50V 0603
2734	2238 586 59812	100nF 20% 50V 0603
2735	2238 586 59812	100nF 20% 50V 0603
2736	2238 586 59812	100nF 20% 50V 0603
2738	2238 586 59812	100nF 20% 50V 0603
2739	2020 021 91557	100µF 20% 16V
2740	2238 787 15641	22nF 5% 16V 0402
2741	2238 787 15641	22nF 5% 16V 0402
2742	2238 787 15641	22nF 5% 16V 0402
2743	2238 586 59812	100nF 20% 50V 0603
2744	2238 586 59812	100nF 20% 50V 0603
2745	2238 586 59812	100nF 20% 50V 0603
2746	2238 586 59812	100nF 20% 50V 0603
2748	2238 586 59812	100nF 20% 50V 0603
2749	2238 586 59812	100nF 20% 50V 0603
2750	2020 552 96618	1nF 10% 50V 0402
2751	2020 552 96618	1nF 10% 50V 0402
2752	2020 552 96618	1nF 10% 50V 0402
2753	2020 552 96618	1nF 10% 50V 0402
2754	2020 552 96618	1nF 10% 50V 0402
2755	2020 552 96618	1nF 10% 50V 0402
2756	2020 552 96618	1nF 10% 50V 0402
2757	2238 787 15641	22nF 5% 16V 0402
2759	2020 552 96618	1nF 10% 50V 0402
2760	2238 787 15641	22nF 5% 16V 0402
2761	2238 787 15641	22nF 5% 16V 0402
2762	2238 787 15641	22nF 5% 16V 0402
2763	2238 787 15641	22nF 5% 16V 0402
2764	2238 787 15641	22nF 5% 16V 0402
2768	2238 787 15641	22nF 5% 16V 0402
2769	2020 552 96618	1nF 10% 50V 0402
2770	2020 552 96618	1nF 10% 50V 0402
2771	2020 552 96618	1nF 10% 50V 0402
2772	2238 787 15641	22nF 5% 16V 0402
2773	2020 552 96618	1nF 10% 50V 0402
2777	2020 552 96618	1nF 10% 50V 0402
2778	2020 552 96618	1nF 10% 50V 0402
2780	2020 552 96618	1nF 10% 50V 0402
2781	2020 552 96618	1nF 10% 50V 0402
2782	2020 552 96618	1nF 10% 50V 0402
2784	2238 787 15641	22nF 5% 16V 0402
2785	2238 787 15641	22nF 5% 16V 0402
2788	2238 586 59812	100nF 20% 50V 0603
2789	2238 586 59812	100nF 20% 50V 0603
2790	2238 586 59812	100nF 20% 50V 0603
2791	2238 586 59812	100nF 20% 50V 0603
2792	2238 586 59812	100nF 20% 50V 0603
2793	2238 586 59812	100nF 20% 50V 0603
2794	2020 552 96618	1nF 10% 50V 0402
2795	2020 552 96618	1nF 10% 50V 0402
2796	2020 552 96618	1nF 10% 50V 0402
2797	2020 552 96618	1nF 10% 50V 0402
2798	2020 552 96618	1nF 10% 50V 0402
2799	2020 552 96618	1nF 10% 50V 0402
2800	2238 586 59812	100nF 20% 50V 0603
2802	2238 586 59812	100nF 20% 50V 0603
2804	2238 586 59812	100nF 20% 50V 0603
2805	2020 552 96618	1nF 10% 50V 0402
2806	2238 586 59812	100nF 20% 50V 0603
2807	2238 586 59812	100nF 20% 50V 0603
2808	2020 552 96618	1nF 10% 50V 0402
2809	2020 552 96618	1nF 10% 50V 0402
2810	2238 586 59812	100nF 20% 50V 0603
2811	2238 586 59812	100nF 20% 50V 0603
2812	3198 031 02290	22Ω 5% 0.1W 0402
2813	2238 586 59812	100nF 20% 50V 0603
2817	2238 586 59812	100nF 20% 50V 0603
2819	2238 586 59812	100nF 20% 50V 0603
2821	2238 787 15641	22nF 5% 16V 0402
2822	2238 787 15641	22nF 5% 16V 0402
2823	2238 586 59812	100nF 20% 50V 0603
2824	2238 586 59812	100nF 20% 50V 0603
2825	2238 586 59812	100nF 20% 50V 0603
2826	2238 586 59812	100nF 20% 50V 0603
2827	2238 586 59812	100nF 20% 50V 0603
2829	2020 021 91557	100µF 20% 16V
2830	2238 586 59812	100nF 20% 50V 0603
2831	2238 586 59812	100nF 20% 50V 0603
2832	2238 586 59812	100nF 20% 50V 0603
2833	2238 586 59812	100nF 20% 50V 0603
2834	2238 586 59812	100nF 20% 50V 0603
2835	2238 586 59812	100nF 20% 50V 0603
2836	2238 586 59812	100nF 20% 50V 0603
2837	2238 869 15101	100pF 5% 50V 0402
2838	2238 869 15101	100pF 5% 50V 0402
2843	2238 586 59812	100nF 20% 50V 0603
2844	2238 586 59812	100nF 20% 50V 0603
2845	2238 586 59812	100nF 20% 50V 0603
2846	2238 586 59812	100nF 20% 50V 0603
2849	2238 586 59812	100nF 20% 50V 0603
2850	2238 586 59812	100nF 20% 50V 0603
2851	2238 586 59812	100nF 20% 50V 0603
2852	2238 586 59812	100nF 20% 50V 0603
2853	2238 586 59812	100nF 20% 50V 0603
2854	2238 586 59812	100nF 20% 50V 0603
2855	2238 586 59812	100nF 20% 50V 0603
2856	2238 586 59812	100nF 20% 50V 0603
2857	2238 586 59812	100nF 20% 50V 0603
2858	2238 586 59812	100nF 20% 50V 0603
2859	2238 586 59812	100nF 20% 50V 0603
2860	2238 586 59812	100nF 20% 50V 0603
2861	2238 586 59812	100nF 20% 50V 0603
2862	2238 586 59812	100nF 20% 50V 0603
2863	2238 586 59812	100nF 20% 50V 0603
2864	2238 586 59812	100nF 20% 50V 0603
2865	2238 586 59812	100nF 20% 50V 0603
2866	2238 586 59812	100nF 20% 50V 0603
2867	2238 586 59812	100nF 20% 50V 0603
2868	2238 586 59812	100nF 20% 50V 0603
2869	2238 586 59812	100nF 20% 50V 0603
2870	2238 586 59812	100nF 20% 50V 0603
2871	2020 021 91557	100µF 20% 16V
2872	2238 586 59812	100nF 20% 50V 0603
2873	2238 586 59812	100nF 20% 50V 0603
2874	2238 586 59812	100nF 20% 50V 0603
2875	2238 586 59812	100nF 20% 50V 0603
2876	2238 586 59812	100nF 20% 50V 0603
2877	2238 586 59812	100nF 20% 50V 0603
2878	2238 586 59812	100nF 20% 50V 0603
2879	2238 586 59812	100nF 20% 50V 0603
2880	2238 586 59812	100nF 20% 50V 0603
2881	3198 034 02790	47pF 1% 50V 0402
2882	2238 586 59812	100nF 20% 50V 0603
2883	2238 586 59812	100nF 20% 50V 0603
2884	2238 586 59812	100nF 20% 50V 0603
2885	2238 586 59812	100nF 20% 50V 0603
2886	2238 586 59812	100nF 20% 50V 0603
2887	2238 586 59812	100nF 20% 50V 0603
2888	2238 586 59812	100nF 20% 50V 0603
2889	2020 021 91557	100µF 20% 16V
2890	2238 586 59812	100nF 20% 50V 0603
2891	2238 586 59812	100nF 20% 50V 0603
2892	2238 586 59812	100nF 20% 50V 0603
2893	2238 586 59812	100nF 20% 50V 0603
2894	2238 586 59812	100nF 20% 50V 0603
2895	2020 021 91854	10µF 20% 16V
2898	2020 021 91854	10µF 20% 16V
2899	2238 586 59812	100nF 20% 50V 0603
2900	3198 034 04790	27pF 1% 50V 0402
2901	3198 034 04790	27pF 1% 50V 0402
2902	3198 034 04790	27pF 1% 50V 0402
2915	3198 034 01510	150pF 1% 50V 0402
2916	3198 034 01510	150pF 1% 50V 0402
2917	2238 586 59812	100nF 20% 50V 0603
2919	2020 021 91557	100µF 20% 16V
2920	2238 586 59812	100nF 20% 50V 0603
2921	2238 586 59812	100nF 20% 50V 0603
2922	2020 552 96628	10nF 10% 16V 0402
2923	2020 552 96628	10nF 10% 16V 0402
2924	2238 586 59812	100nF 20% 50V 0603
2931	3198 034 01510	150pF 1% 50V 0402
2932	2238 586 59812	100nF 20% 50V 0603
2933	2238 586 59812	100nF 20% 50V 0603
2937	2020 021 91557	100µF 20% 16V
2938	2020 021 91854	10µF 20% 16V
2939	2020 021 91557	100µF 20% 16V
2A00	2020 552 96618	1nF 10% 50V 0402
2A01	2020 552 96618	1nF 10% 50V 0402
2A02	2022 552 05679	1µF 10% 16V 0805
2A03	2020 021 91557	100µF 20% 16V
2A04	2022 552 05679	1µF 10% 16V 0805
2A05	2020 021 91557	100µF 20% 16V
2A06	2020 552 96618	1nF 10% 50V 0402
2A07	2020 552 96618	1nF 10% 50V 0402
2A08	2022 552 05679	1µF 10% 16V 0805
2A10	2238 586 59812	100nF 20% 50V 0603
2A11	2238 586 59812	100nF 20% 50V 0603
2A12	2238 586 59812	100nF 20% 50V 0603
2A13	2238 586 59812	100nF 20% 50V 0603
2A14	2020 552 96618	1nF 10% 50V 0402
2A15	2020 021 91557	100µF 20% 16V
2A16	2238 586 59812	100nF 20% 50V 0603
2A17	2020 552 96618	1nF 10% 50V 0402
2A18	2020 021 91557	100µF 20% 16V
2A19	3198 034 02790	47pF 1% 50V 0402
2A20	2022 552 05679	1µF 10% 16V 0805
2A21	2238 586 59812	100nF 20% 50V 0603
2A22	2238 586 59812	100nF 20% 50V 0603
2A23	2238 586 59812	100nF 20% 50V 0603
2A24	2238 586 59812	100nF 20% 50V 0603
2A25	2238 869 15101	100pF 5% 50V 0402
2A26	2022 552 05679	1µF 10% 16V 0805
2A27	2020 552 96618	1nF 10% 50V 0402
2A29	2238 869 15101	100pF 5% 50V 0402
2A30	2238 869 15101	100pF 5% 50V 0402
2A31	2022 552 05679	1µF 10% 16V 0805
2A32	2238 869 15101	100pF 5% 50V 0402
2A33	2238 586 59812	100nF 20% 50V 0603
2A34	2238 586 59812	100nF 20% 50V 0603
2A35	2020 552 96618	1nF 10% 50V 0402
2A36	2238 869 15101	100pF 5% 50V 0402
2A37	2238 869 15101	100pF 5% 50V 0402
2A38	2022 552 05679	1µF 10% 16V 0805
2A39	2022 552 05679	1µF 10% 16V 0805
2A40	2238 586 59812	100nF 20% 50V 0603
2A41	2020 021 91854	10µF 20% 16V
2A42	2020 021 91854	10µF 20% 16V
2A43	2020 021 91854	10µF 20% 16V
2A44	2238 586 59812	100nF 20% 50V 0603
2A45	2238 586 59812	100nF 20% 50V 0603
2A46	2022 552 05679	1µF 10% 16V 0805
2A47	2022 552 05679	1µF 10% 16V 0805
2A49	2022 552 05679	1µF 10% 16V 0805
2A50	2020 552 96618	1nF 10% 50V 0402
2A53	2022 552 05679	1µF 10% 16V 0805
2A54	2020 552 96618	1nF 10% 50V 0402
2A56	2022 552 05679	1µF 10% 16V 0805
2A59	2022 552 05679	1µF 10% 16V 0805
2A62	2022 552 05679	1µF 10% 16V 0805
2A79	2238 586 59812	100nF 20% 50V 0603
2A91	2238 869 15101	100pF 5% 50V 0402
2A92	2022 552 05679	1µF 10% 16V 0805
2A95	3198 035 02210	220pF 5% 50V 0402
2A99	2022 552 05679	1µF 10% 16V 0805
2AA5	2238 869 15101	100pF 5% 50V 0402
2AA6	2020 552 96618	1nF 10% 50V 0402
2AA7	2020 552 96618	1nF 10% 50V 0402
2AA9	3198 034 05680	5.6pF 1% 50V 0402
2AB0	3198 034 05680	5.6pF 1% 50V 0402
2AB2	2020 552 96618	1nF 10% 50V 0402
2AB3	2022 552 05679	1µF 10% 16V 0805
2AB4	2022 552 05679	1µF 10% 16V 0805
2AB5	2020 021 91854	10µF 20% 16V
2AB6	2020 552 96618	1nF 10% 50V 0402
2AB7	2020 552 96618	1nF 10% 50V 0402
2AB8	2022 552 05679	1µF 10% 16V 0805
2AF3	4822 124 12095	100µF 20% 16V
2AF4	2238 586 59812	100nF 20% 50V 0603
2C00	2238 586 59812	100nF 20% 50V 0603
2C01	2238 586 59812	100nF 20% 50V 0603
2C02	2238 586 59812	100nF 20% 50V 0603
2D04	2020 552 96618	1nF 10% 50V 0402
2D09	2238 586 59812	100nF 20% 50V 0603
2D10	2022 552 05679	1µF 10% 16V 0805
2D11	2020 552 96628	10nF 10% 16V 0402
2D12	2020 552 96628	10nF 10% 16V 0402
2E01	2238 586 59812	100nF 20% 50V 0603
2E02	2238 586 59812	100nF 20% 50V 0603
2E03	2238 586 59812	100nF 20% 50V 0603
2E04	2238 586 59812	100nF 20% 50V 0603
2E06	2238 586 59812	100nF 20% 50V 0603
2E07	2238 586 59812	100nF 20% 50V 0603
2E08	2238 586 59812	100nF 20% 50V 0603
2E09	2238 586 59812	100nF 20% 50V 0603
2E10	2238 586 59812	100nF 20% 50V 0603
2E11	2238 586 59812	100nF 20% 50V 0603
2E12	2238 586 59812	100nF 20% 50V 0603
2E13	2238 586 59812	100nF 20% 50V 0603
2E14	2238 586 59812	100nF 20% 50V 0603
2E15	2238 586 59812	100nF 20% 50V 0603
2E16	2238 586 59812	100nF 20% 50V 0603
2E17	2238 586 59812	100nF 20% 50V 0603
2E18	2238 586 59812	100nF 20% 50V 0603
2E19	2238 586 59812	100nF 20% 50V 0603
2E20	2238 586 59812	100nF 20% 50V 0603
2E21	3198 017 34730	47nF 16V 0603
2E22	4822 126 14519	22pF 5% 50V 0402
2E23	3198 017 34730	47nF 16V 0603
2E24	4822 126 14519	22pF 5% 50V 0402
2E25	3198 017 34730	47nF 16V 0603
2E26	4822 126 14519	22pF 5% 50V 0402
2E27	2238 586 59812	100nF 20% 50V 0603
2E28	3198 017 34730	47nF 16V 0603
2E29	3198 017 33330	33nF 20% 16V 0603
2E34	3198 035 03320	3.3nF 5% 50V 0402
2E35	2238 586 59812	100nF 20% 50V 0603
2E39	2238 869 15109	10pF 5% 50V 0402
2E41	2238 586 59812	100nF 20% 50V 0603
2E42	2020 552 96628	10nF 10% 16V 0402
2E43	2238 586 59812	100nF 20% 50V 0603
2E49	2238 586 59812	100nF 20% 50V 0603
2E50	4822 124 81058	47µF 20% 4V
2E51	2022 552 05679	1µF 10% 16V 0805
2E52	2238 586 59812	100nF 20% 50V 0603
2E54	2238 586 59812	100nF 20% 50V 0603
2E55	2022 552 05679	1µF 10% 16V 0805
2E56	2020 552 96628	10nF 10% 16V 0402
2E57	2020 552 96628	10nF 10% 16V 0402
2E58	2020 552 96628	10nF 10% 16V 0402
2E59	2020 552 96628	10nF 10% 16V 0402

2E62	2238 586 59812	100nF 20% 50V 0603
2E65	2238 586 59812	100nF 20% 50V 0603
2E66	2238 586 59812	100nF 20% 50V 0603
2E67	2238 586 59812	100nF 20% 50V 0603
2E68	2020 552 96628	10nF 10% 16V 0402
2E69	2020 552 96628	10nF 10% 16V 0402
2E70	2020 552 96628	10nF 10% 16V 0402
2E71	2020 552 96628	10nF 10% 16V 0402
2E72	2238 586 59812	100nF 20% 50V 0603
2E73	2238 586 59812	100nF 20% 50V 0603
2E74	2238 586 59812	100nF 20% 50V 0603
2E75	2238 586 59812	100nF 20% 50V 0603
2E77	2238 586 59812	100nF 20% 50V 0603
2E78	2238 586 59812	100nF 20% 50V 0603
2E79	2238 586 59812	100nF 20% 50V 0603
2E80	2238 586 59812	100nF 20% 50V 0603
2E81	2022 552 05679	1µF 10% 16V 0805
2E82	2238 586 59812	100nF 20% 50V 0603
2E83	2238 586 59812	100nF 20% 50V 0603
2E84	2238 586 59812	100nF 20% 50V 0603
2E86	2238 586 59812	100nF 20% 50V 0603
2E87	4822 124 12095	100µF 20% 16V
2E93	2238 586 59812	100nF 20% 50V 0603
2E94	2238 586 59812	100nF 20% 50V 0603
2E96	2238 869 15101	100pF 5% 50V 0402
2E97	2238 869 15101	100pF 5% 50V 0402
2E98	2238 869 15101	100pF 5% 50V 0402
2E99	4822 124 81058	47µF 20% 4V
2I00	2238 869 15101	100pF 5% 50V 0402
2I11	2022 552 05679	1µF 10% 16V 0805
2I12	4822 126 14585	100nF 10% 0805 50V
2I15	2022 552 05679	1µF 10% 16V 0805
2I16	2238 869 15101	100pF 5% 50V 0402
2I17	2238 869 15101	100pF 5% 50V 0402
2I18	2238 869 15101	100pF 5% 50V 0402
2I19	2238 869 15101	100pF 5% 50V 0402
2I20	3198 035 03310	330pF 5% 50V 0402
2I21	2238 869 15101	100pF 5% 50V 0402
2I22	2238 869 15101	100pF 5% 50V 0402
2I23	2238 869 15101	100pF 5% 50V 0402
2I24	2238 869 15101	100pF 5% 50V 0402
2I25	3198 035 03310	330pF 5% 50V 0402
2I26	2238 869 15101	100pF 5% 50V 0402
2I27	2238 869 15101	100pF 5% 50V 0402
2I30	2238 869 15101	100pF 5% 50V 0402
2I32	4822 124 23002	10µF 16V
2I36	2238 869 15101	100pF 5% 50V 0402
2I38	2238 869 15101	100pF 5% 50V 0402
2I46	2020 552 96618	1nF 10% 50V 0402
2I47	2020 552 96618	1nF 10% 50V 0402
2I50	2238 586 59812	100nF 20% 50V 0603
2I57	2238 869 15101	100pF 5% 50V 0402
2I58	2238 869 15101	100pF 5% 50V 0402
2I64	2238 869 15101	100pF 5% 50V 0402
2I65	2238 869 15101	100pF 5% 50V 0402
2I69	4822 126 14324	33pF 5% 50V 0402
2I70	4822 126 14324	33pF 5% 50V 0402
2I86	4822 126 14324	33pF 5% 50V 0402
2I87	2238 869 15101	100pF 5% 50V 0402
2I88	2238 869 15101	100pF 5% 50V 0402
2I89	2022 552 05679	1µF 10% 16V 0805
2I90	2022 552 05679	1µF 10% 16V 0805
2I91	2238 586 59812	100nF 20% 50V 0603
2I92	2022 552 05679	1µF 10% 16V 0805
2I93	2238 586 59812	100nF 20% 50V 0603
2I94	2238 586 59812	100nF 20% 50V 0603
2I95	2238 586 59812	100nF 20% 50V 0603
2I96	2022 552 05679	1µF 10% 16V 0805
2I97	2238 586 59812	100nF 20% 50V 0603
2I98	2238 586 59812	100nF 20% 50V 0603
2I99	4822 124 23002	10µF 16V
2IA0	4822 124 23002	10µF 16V
2IA1	4822 124 23002	10µF 16V
2IA2	4822 124 23002	10µF 16V
2IA3	2020 552 96618	1nF 10% 50V 0402
2IA4	4822 126 14585	100nF 10% 0805 50V
2IA5	2020 021 91557	100µF 20% 16V
2IA9	2020 021 91557	100µF 20% 16V
2IB0	2238 586 59812	100nF 20% 50V 0603
2IB3	2238 586 59812	100nF 20% 50V 0603
2IB5	2022 552 05679	1µF 10% 16V 0805
2IB8	2238 586 59812	100nF 20% 50V 0603
2IB9	2238 586 59812	100nF 20% 50V 0603
2IC0	4822 124 23002	10µF 16V
2IC1	4822 124 23002	10µF 16V
2IC3	2238 586 59812	100nF 20% 50V 0603
2IC5	2238 586 59812	100nF 20% 50V 0603
2IC6	3198 034 04790	27pF 1% 50V 0402
2IC7	3198 034 04790	27pF 1% 50V 0402
2IC8	2022 552 05679	1µF 10% 16V 0805
2IC9	4822 126 13883	220pF 5% 50V
2IE1	2238 586 59812	100nF 20% 50V 0603
2IE2	2238 586 59812	100nF 20% 50V 0603
2IE3	2022 552 05679	1µF 10% 16V 0805
2IE4	2238 586 59812	100nF 20% 50V 0603
2IE5	2238 586 59812	100nF 20% 50V 0603
2IE6	2238 586 59812	100nF 20% 50V 0603
2IE7	2022 552 05679	1µF 10% 16V 0805
2IE8	2022 552 05679	1µF 10% 16V 0805
2IE9	2238 586 59812	100nF 20% 50V 0603
2IF1	2238 586 59812	100nF 20% 50V 0603
2IF2	2238 586 59812	100nF 20% 50V 0603
2IF3	2238 586 59812	100nF 20% 50V 0603
2IF4	4822 124 80151	47µF 16V
2IF5	2238 586 59812	100nF 20% 50V 0603
2IF8	4822 124 11946	22µF 20% 16V
2IF9	4822 124 11946	22µF 20% 16V
2IG1	2238 586 59812	100nF 20% 50V 0603
2IG2	5322 124 41945	22µF 20% 35V
2IG3	2238 586 59812	100nF 20% 50V 0603
2IG4	2238 586 59812	100nF 20% 50V 0603
2IG5	2238 586 59812	100nF 20% 50V 0603
2IG6	2238 586 59812	100nF 20% 50V 0603
2IG7	2238 586 59812	100nF 20% 50V 0603
2IG8	2238 586 59812	100nF 20% 50V 0603
2IG9	2238 586 59812	100nF 20% 50V 0603
2IH1	2238 586 59812	100nF 20% 50V 0603
2IH2	2238 586 59812	100nF 20% 50V 0603
2IH3	2020 552 96618	1nF 10% 50V 0402
2IH4	2022 552 05679	1µF 10% 16V 0805
2IH5	2238 586 59812	100nF 20% 50V 0603
2IH6	4822 124 11946	22µF 20% 16V
2IH7	4822 124 11946	22µF 20% 16V
2IH8	4822 124 11946	22µF 20% 16V
2IH9	4822 124 11946	22µF 20% 16V
2IJ4	2238 586 59812	100nF 20% 50V 0603
2IJ8	2022 552 05679	1µF 10% 16V 0805
2IJ9	2022 552 05679	1µF 10% 16V 0805
2IK1	2238 780 15654	220nF 10% 16V 0805
2IK5	2238 586 59812	100nF 20% 50V 0603
2IK6	2238 586 59812	100nF 20% 50V 0603
2IK7	2238 586 59812	100nF 20% 50V 0603
2IL0	2238 869 15109	10pF 5% 50V 0402
2IN8	2238 586 59812	100nF 20% 50V 0603
2IN9	2238 586 59812	100nF 20% 50V 0603
2IS6	4822 124 12095	100µF 20% 16V
2L00	4822 124 23237	22µF 6.3V
2L01	2238 586 59812	100nF 20% 50V 0603
2L02	2238 586 59812	100nF 20% 50V 0603
2L03	2238 586 59812	100nF 20% 50V 0603
2L04	2238 586 59812	100nF 20% 50V 0603
2L05	2238 586 59812	100nF 20% 50V 0603
2L06	2238 586 59812	100nF 20% 50V 0603
2L07	2238 586 59812	100nF 20% 50V 0603
2L08	2238 586 59812	100nF 20% 50V 0603
2L09	2238 586 59812	100nF 20% 50V 0603
2L10	2238 586 59812	100nF 20% 50V 0603
2L11	2238 586 59812	100nF 20% 50V 0603
2L12	2238 586 59812	100nF 20% 50V 0603
2L13	2238 586 59812	100nF 20% 50V 0603
2L14	2238 586 59812	100nF 20% 50V 0603
2L15	2238 586 59812	100nF 20% 50V 0603
2L16	2238 586 59812	100nF 20% 50V 0603
2L17	2238 586 59812	100nF 20% 50V 0603
2L19	4822 124 23237	22µF 6.3V
2L20	2238 586 59812	100nF 20% 50V 0603
2L21	2238 586 59812	100nF 20% 50V 0603
2L22	2238 586 59812	100nF 20% 50V 0603
2L25	2238 586 59812	100nF 20% 50V 0603
2L26	3198 017 33330	33nF 20% 16V 0603
2L27	3198 035 14720	4.7nF 5% 25V 0402
2L28	3198 034 03990	39pF 1% 50V 0402
2L29	3198 034 03990	39pF 1% 50V 0402
2L30	3198 034 03990	39pF 1% 50V 0402
2L31	3198 017 34730	47nF 16V 0603
2L32	3198 035 03320	3.3nF 5% 50V 0402
2L33	2238 586 59812	100nF 20% 50V 0603
2L34	2238 586 59812	100nF 20% 50V 0603
2L51	4822 124 23237	22µF 6.3V
2L52	3198 017 34730	47nF 16V 0603
2L54	3198 017 34730	47nF 16V 0603
2L56	2020 552 96618	1nF 10% 50V 0402
2L57	3198 017 34730	47nF 16V 0603
2L58	4822 124 23237	22µF 6.3V
2L60	3198 034 04790	27pF 1% 50V 0402
2P80	4822 124 12095	100µF 20% 16V
2P81	2238 586 59812	100nF 20% 50V 0603
2T01	3198 032 28210	220µF 20% 6.3V
2T04	2238 586 15641	22nF 10% 50V 0603
2T05	3198 032 28210	220µF 20% 6.3V
2T06	2020 552 96628	10nF 10% 16V 0402
2T09	3198 017 34730	47nF 16V 0603
2T12	2238 586 59812	100nF 20% 50V 0603
2T13	2020 552 96628	10nF 10% 16V 0402
2T15	2022 552 05679	1µF 10% 16V 0805
2T21	2020 552 96683	220nF 10% 50V
2T22	2020 552 96683	220nF 10% 50V
2T30	2022 552 05635	22µF 10% 16V
2T31	2022 552 05635	22µF 10% 16V
2T32	2238 586 59812	100nF 20% 50V 0603
2T33	2238 586 59812	100nF 20% 50V 0603
2T34	2020 552 96618	1nF 10% 50V 0402
2T35	2238 586 59812	100nF 20% 50V 0603
2T36	2022 552 05679	1µF 10% 16V 0805
2T37	2020 552 96628	10nF 10% 16V 0402
2T38	2238 586 59812	100nF 20% 50V 0603
2T40	2238 586 59812	100nF 20% 50V 0603
2T41	5322 126 11578	1nF 10% 50V 0603
2T42	2238 916 15641	22nF 10% 25V 0603
2T43	2022 552 05635	22µF 10% 16V
2T44	2020 552 96628	10nF 10% 16V 0402
2T45	2020 552 96628	10nF 10% 16V 0402
2T46	5322 126 11578	1nF 10% 50V 0603
2T47	3198 035 04710	470pF 50V 0402
2T48	2238 586 59812	100nF 20% 50V 0603
2T49	2020 552 96618	1nF 10% 50V 0402
2T50	2020 552 96628	10nF 10% 16V 0402
2T51	2022 552 05679	1µF 10% 16V 0805
2T52	2022 552 05679	1µF 10% 16V 0805
2T53	3198 035 03320	3.3nF 5% 50V 0402
2T54	2238 586 59812	100nF 20% 50V 0603
2T60	3198 032 28210	220µF 20% 6.3V
2T62	2020 552 96683	220nF 10% 50V
2T63	2020 552 96683	220nF 10% 50V
2U03	2022 552 05679	1µF 10% 16V 0805
2U04	4822 126 14583	470nF 10% 16V 0805
2U05	2020 552 96618	1nF 10% 50V 0402
2U06	2022 552 05635	22µF 10% 16V
2U07	2238 869 15829	82pF 5% 50V 0402
2U08	2022 552 05635	22µF 10% 16V
2U09	2020 552 96618	1nF 10% 50V 0402
2U10	2022 552 05635	22µF 10% 16V
2U11	2020 552 96618	1nF 10% 50V 0402
2U12	2020 552 96628	10nF 10% 16V 0402
2U13	2238 780 15654	220nF 10% 16V 0805
2U14	4822 126 14583	470nF 10% 16V 0805
2U15	4822 124 12095	100µF 20% 16V
2U16	3198 035 14720	4.7nF 5% 25V 0402
2U17	4822 126 14583	470nF 10% 16V 0805
2U18	3198 034 01210	120pF 1% 50V 0402
2U19	2238 586 59812	100nF 20% 50V 0603
2U20	2022 552 05679	1µF 10% 16V 0805
2U21	4822 126 14583	470nF 10% 16V 0805
2U22	2022 552 05679	1µF 10% 16V 0805
2U23	4822 124 12095	100µF 20% 16V
2U24	2020 552 96618	1nF 10% 50V 0402
2U25	2238 586 59812	100nF 20% 50V 0603
2U26	2238 586 59812	100nF 20% 50V 0603
2U27	3198 035 26820	6.8nF 10% 16V 0402
2U28	3198 035 26820	6.8nF 10% 16V 0402
2U30	3198 034 01210	120pF 1% 50V 0402
2U31	4822 124 12095	100µF 20% 16V
2U32	3198 035 03320	3.3nF 5% 50V 0402
2U33	2022 552 05679	1µF 10% 16V 0805
2U34	2238 787 15641	22nF 5% 16V 0402
2U35	2022 552 05679	1µF 10% 16V 0805
2U36	2238 586 59812	100nF 20% 50V 0603
2U37	2020 552 96623	2.2nF 10% 50V 0402
2U39	2238 586 59812	100nF 20% 50V 0603
2U40	2020 552 96623	2.2nF 10% 50V 0402
2U41	3198 035 26820	6.8nF 10% 16V 0402
2U42	3198 017 34730	47nF 16V 0603
2V11	3198 035 04710	470pF 50V 0402
2V12	3198 035 04710	470pF 50V 0402
2Y00	2238 869 15101	100pF 5% 50V 0402
2Y01	2238 869 15101	100pF 5% 50V 0402
2Y02	2238 869 15101	100pF 5% 50V 0402
2Y03	2238 869 15101	100pF 5% 50V 0402
2Y06	2020 552 96618	1nF 10% 50V 0402
2Y07	2238 869 15101	100pF 5% 50V 0402
2Y08	2020 552 96618	1nF 10% 50V 0402
2Y09	2238 869 15101	100pF 5% 50V 0402
2Y10	2238 869 15101	100pF 5% 50V 0402
2Y11	2020 552 96618	1nF 10% 50V 0402
2Y12	2238 869 15101	100pF 5% 50V 0402
2Y14	2238 869 15101	100pF 5% 50V 0402
2Y15	2238 869 15101	100pF 5% 50V 0402
2Y16	2238 869 15101	100pF 5% 50V 0402
2Y17	2238 869 15101	100pF 5% 50V 0402
2Y18	2238 869 15101	100pF 5% 50V 0402
2Y19	2238 869 15101	100pF 5% 50V 0402
2Y22	2020 552 96618	1nF 10% 50V 0402
2Y23	2238 869 15101	100pF 5% 50V 0402
2Y25	2238 869 15101	100pF 5% 50V 0402
2Y26	2238 869 15101	100pF 5% 50V 0402
2Y27	2020 552 96618	1nF 10% 50V 0402
2Y28	2020 552 96618	1nF 10% 50V 0402
2Y29	2020 552 96618	1nF 10% 50V 0402
2Y30	4822 124 12095	100µF 20% 16V
2Y31	4822 124 12095	100µF 20% 16V
2Y32	2020 552 96618	1nF 10% 50V 0402
2Y33	2020 552 96618	1nF 10% 50V 0402

2Y34	2238 869 15101	100pF 5% 50V 0402
2Y37	2238 869 15101	100pF 5% 50V 0402
2Y38	2238 869 15101	100pF 5% 50V 0402
2Y39	2238 869 15101	100pF 5% 50V 0402
2Y40	2238 869 15101	100pF 5% 50V 0402
2Y41	2238 869 15101	100pF 5% 50V 0402
2Y42	2238 869 15101	100pF 5% 50V 0402
2Y43	2238 869 15101	100pF 5% 50V 0402
2Y49	2238 869 15101	100pF 5% 50V 0402
2Y50	2238 869 15101	100pF 5% 50V 0402
2Y51	2238 869 15101	100pF 5% 50V 0402
2Y52	2238 787 15641	22nF 5% 16V 0402
2Y53	2238 869 15101	100pF 5% 50V 0402
2Z44	4822 126 14519	22pF 5% 50V 0402
2Z45	4822 126 14519	22pF 5% 50V 0402
2Z46	4822 126 14519	22pF 5% 50V 0402
2Z47	4822 126 14519	22pF 5% 50V 0402
2Z48	4822 126 14519	22pF 5% 50V 0402
2Z49	4822 126 14519	22pF 5% 50V 0402
2Z50	4822 126 14519	22pF 5% 50V 0402
2Z51	4822 126 14519	22pF 5% 50V 0402
2Z52	4822 126 14519	22pF 5% 50V 0402
2Z53	4822 126 14519	22pF 5% 50V 0402
2Z55	2238 586 59812	100nF 20% 50V 0603
2Z56	2020 552 96618	1nF 10% 50V 0402
2Z63	2238 586 59812	100nF 20% 50V 0603
2Z64	2238 586 59812	100nF 20% 50V 0603

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3001	3198 031 04720	4.7kΩ 5% 0402
3002	3198 031 04720	4.7kΩ 5% 0402
3003	4822 117 13525	24kΩ 1% 0.62W 0603
3005	4822 117 13606	10kΩ 5% 0.01W 0402
3006	4822 117 13543	470Ω 5% 0402
3007	2350 033 10471	4 x 470Ω 5%
3008	2350 033 10101	4 x 100Ω 5%
3009	3198 031 01810	180Ω 5% 0402
3010	4822 117 13606	10kΩ 5% 0.01W 0402
3011	3198 031 04720	4.7kΩ 5% 0402
3012	2350 033 10101	4 x 100Ω 5%
3013	4822 117 13606	10kΩ 5% 0.01W 0402
3014	3198 031 06820	6.8kΩ 5% 0.01W 0402
3016	2322 706 71502	1.5kΩ 1% 0402
3017	3198 031 04720	4.7kΩ 5% 0402
3018	4822 117 13606	10kΩ 5% 0.01W 0402
3019	3198 031 04720	4.7kΩ 5% 0402
3020	4822 117 13606	10kΩ 5% 0.01W 0402
3021	4822 117 13606	10kΩ 5% 0.01W 0402
3022	3198 031 01230	12kΩ 5% 0402
3023	4822 117 13601	22kΩ 5% 0402
3024	3198 031 02730	27kΩ 5% 0402
3025	4822 117 13596	220Ω 5% 0.01W 0402
3026	3198 031 04720	4.7kΩ 5% 0402
3027	3198 031 04730	47Ω 5% 0402
3028	3198 031 04720	4.7kΩ 5% 0402
3029	2350 033 10101	4 x 100Ω 5%
3030	3198 031 04720	4.7kΩ 5% 0402
3031	2350 033 10101	4 x 100Ω 5%
3032	4822 117 13606	10kΩ 5% 0.01W 0402
3033	4822 117 11297	100kΩ 5% 0.1W
3034	2350 033 10101	4 x 100Ω 5%
3035	2350 033 10101	4 x 100Ω 5%
3036	3198 031 04730	47Ω 5% 0402
3037	4822 117 13548	1kΩ 5% 0402
3038	4822 117 13606	10kΩ 5% 0.01W 0402
3039	4822 117 13597	330Ω 5% 0402 0.01W
3046	2350 033 10101	4 x 100Ω 5%
3048	2350 033 10101	4 x 100Ω 5%
3049	2350 033 10101	4 x 100Ω 5%
3050	2350 033 10101	4 x 100Ω 5%
3051	2350 033 10101	4 x 100Ω 5%
3052	2350 033 10101	4 x 100Ω 5%
3053	4822 117 13606	10kΩ 5% 0.01W 0402
3054	2350 033 10101	4 x 100Ω 5%
3055	2350 033 10101	4 x 100Ω 5%
3056	2350 033 10101	4 x 100Ω 5%
3057	2350 033 10101	4 x 100Ω 5%
3061	2350 033 10101	4 x 100Ω 5%
3062	4822 117 13606	10kΩ 5% 0.01W 0402
3064	2350 033 10101	4 x 100Ω 5%
3065	3198 031 04720	4.7kΩ 5% 0402
3066	3198 031 04730	47Ω 5% 0402
3068	4822 051 30472	4.7Ω 5% 0.062W
3069	3198 031 01820	1.8kΩ 5% 0.01W 0402
3072	2350 033 10101	4 x 100Ω 5%
3073	2350 033 10471	4 x 470Ω 5%
3074	2350 033 10471	4 x 470Ω 5%
3075	2020 552 96628	10nF 10% 16V 0402
3076	2350 033 10471	4 x 470Ω 5%
3077	3198 031 04720	4.7kΩ 5% 0402
3078	2350 033 10471	4 x 470Ω 5%
3079	3198 031 01820	1.8kΩ 5% 0.01W 0402
3080	4822 117 13606	10kΩ 5% 0.01W 0402
3081	4822 117 13543	470Ω 5% 0402
3082	2350 033 10101	4 x 100Ω 5%
3083	2350 033 10101	4 x 100Ω 5%
3084	4822 117 13606	10kΩ 5% 0.01W 0402
3085	2350 033 10101	4 x 100Ω 5%
3086	2350 033 10101	4 x 100Ω 5%
3087	4822 117 13545	100Ω 1% 0402
3088	3198 031 01820	1.8kΩ 5% 0.01W 0402
3089	4822 117 13545	100Ω 1% 0402
3090	2350 033 10471	4 x 470Ω 5%
3092	3198 031 01820	1.8kΩ 5% 0.01W 0402
3093	4822 117 13606	10kΩ 5% 0.01W 0402
3097	4822 117 13543	470Ω 5% 0402
3099	2350 033 10471	4 x 470Ω 5%
3100	4822 117 13596	220Ω 5% 0.01W 0402
3101	4822 117 13596	220Ω 5% 0.01W 0402
3102	2350 033 10101	4 x 100Ω 5%
3103	4822 117 13543	470Ω 5% 0402
3304▲	2322 750 63908	3.9Ω 5% Fuse 1206
3370	4822 117 13545	100Ω 1% 0402
3371	4822 117 13546	47Ω 5% 0402
3372	4822 117 13543	470Ω 5% 0402
3376	4822 117 13545	100Ω 1% 0402
3377	4822 117 13545	100Ω 1% 0402
3378	3198 031 01530	15kΩ 5% 0.01W 0402
3380	4822 117 13545	100Ω 1% 0402
3382	4822 117 13543	470Ω 5% 0402
3385	4822 117 13543	470Ω 5% 0402
3393	4822 117 11297	100kΩ 5% 0.1W
3400▲	4822 117 11152	4.7Ω 5%
3402▲	2322 750 63908	3.9Ω 5% Fuse 1206
3405	4822 117 13548	1kΩ 5% 0402
3408	4822 117 13545	100Ω 1% 0402
3411	3198 031 02720	2.7kΩ 5% 0.01W 0402
3412▲	4822 117 11152	4.7Ω 5%
3413	3198 031 02710	270Ω 5% 0.1W 0402
3414	3198 031 04720	4.7kΩ 5% 0402
3415	4822 117 13602	2.2kΩ 5% 0.01W 0402
3418	3198 031 03910	390Ω 1% 0402
3419	3198 031 03390	33Ω 1% 0402
3422	4822 117 13548	1kΩ 5% 0402
3435	3198 031 04720	4.7kΩ 5% 0402
3436	3198 031 01810	180Ω 5% 0402
3437	4822 117 13543	470Ω 5% 0402
3439	4822 117 13597	330Ω 5% 0402 0.01W
3441	3198 031 05620	5.6kΩ 5% 0.01W 0402
3445	4822 117 13543	470Ω 5% 0402
3463	3198 031 04720	4.7kΩ 5% 0402
3473	4822 117 13548	1kΩ 5% 0402
3474	3198 031 01090	10Ω 5% 0.01W 0402
3475▲	5322 117 11726	10Ω 5%
3500	4822 051 30101	100Ω 5% 0.062W
3501	4822 051 30101	100Ω 5% 0.062W
3502	4822 051 30223	22kΩ 5% 0.062W
3503	4822 051 30101	100Ω 5% 0.062W
3504	4822 051 30101	100Ω 5% 0.062W
3505	4822 051 30223	22kΩ 5% 0.062W
3506	4822 051 30759	75Ω 5% 0.062W
3507	4822 051 30759	75Ω 5% 0.062W
3508	4822 051 30759	75Ω 5% 0.062W
3509	4822 051 30101	100Ω 5% 0.062W
3510	4822 051 30759	75Ω 5% 0.062W
3511	4822 051 30479	47Ω 5% 0.062W
3512	4822 051 30479	47Ω 5% 0.062W
3513	4822 051 30479	47Ω 5% 0.062W
3514	4822 051 30479	47Ω 5% 0.062W
3515	4822 051 30479	47Ω 5% 0.062W
3516	4822 051 30479	47Ω 5% 0.062W
3517	4822 117 12925	47kΩ 1% 0.063W 0603
3522	4822 051 30272	2.7kΩ 5% 0.062W
3523	4822 051 30223	22kΩ 5% 0.062W
3524	4822 051 30479	47Ω 5% 0.062W
3525	4822 051 30102	1kΩ 5% 0.062W
3526	5322 117 13056	8.2kΩ 1% 0.063W 0603
3527	4822 051 30683	68kΩ 5% 0.062W
3528	4822 051 30223	22kΩ 5% 0.062W
3529	4822 051 30102	1kΩ 5% 0.062W
3535	4822 051 30479	47Ω 5% 0.062W
3536	4822 051 30103	10kΩ 5% 0.062W
3543	4822 051 30759	75Ω 5% 0.062W
3599	4822 051 30102	1kΩ 5% 0.062W
3700	3198 031 02290	22Ω 5% 0.1W 0402
3701	4822 117 13548	1kΩ 5% 0402
3702	3198 031 01090	10Ω 5% 0.01W 0402
3706	4822 117 13545	100Ω 1% 0402
3707	4822 117 13545	100Ω 1% 0402
3709	4822 117 13545	100Ω 1% 0402
3710	4822 117 13545	100Ω 1% 0402
3712	3198 031 04730	47Ω 5% 0402
3713	4822 117 13605	Jumper 0402
3714	4822 117 13605	Jumper 0402
3715	4822 117 13605	Jumper 0402
3721	4822 117 13545	100Ω 1% 0402
3722	4822 117 13548	1kΩ 5% 0402
3724	4822 117 13545	100Ω 1% 0402
3725	3198 031 03320	3.3kΩ 5% 0402
3726	3198 031 01220	1.2kΩ 5% 0.01W 0402
3727	3198 031 01510	150Ω 5% 0.01W 0402
3728	3198 031 01510	150Ω 5% 0.01W 0402
3729	4822 117 13605	Jumper 0402
3732	3198 031 04730	47Ω 5% 0402
3733	4822 117 13548	1kΩ 5% 0402
3734	4822 117 13545	100Ω 1% 0402
3736	4822 117 13545	100Ω 1% 0402
3737	4822 117 13548	1kΩ 5% 0402
3738	4822 117 13548	1kΩ 5% 0402
3739	3198 031 01230	12kΩ 5% 0402
3740	3198 031 04720	4.7kΩ 5% 0402
3742	4822 117 13601	22kΩ 5% 0402
3743	4822 117 13606	10kΩ 5% 0.01W 0402
3746	3198 031 03920	3.9kΩ 5% 0402
3747	3198 031 04730	47Ω 5% 0402
3748	2322 705 70124	120kΩ 5% 0402
3749	3198 031 03920	3.9kΩ 5% 0402
3750	3198 031 03920	3.9kΩ 5% 0402
3751	3198 031 03320	3.3kΩ 5% 0402
3752	4822 117 13605	Jumper 0402
3753	4822 117 13605	Jumper 0402
3754	4822 117 13545	100Ω 1% 0402
3755	3198 031 04720	4.7kΩ 5% 0402
3756	4822 117 13606	10kΩ 5% 0.01W 0402
3757	3198 031 01510	150Ω 5% 0.01W 0402
3758	3198 031 04720	4.7kΩ 5% 0402
3759	4822 117 13596	220Ω 5% 0.01W 0402
3762	3198 031 06890	68Ω 5% 0402
3763	3198 031 06890	68Ω 5% 0402
3764	3198 031 06890	68Ω 5% 0402
3766	4822 117 13548	1kΩ 5% 0402
3767	3198 031 06890	68Ω 5% 0402
3768	3198 031 06890	68Ω 5% 0402
3769	3198 031 06890	68Ω 5% 0402
3770	3198 031 06890	68Ω 5% 0402
3771	3198 031 07590	75Ω 5% 0402
3772	3198 031 07590	75Ω 5% 0402
3773	3198 031 07590	75Ω 5% 0402
3774	3198 031 06890	68Ω 5% 0402
3775	3198 031 06890	68Ω 5% 0402
3776	3198 031 07590	75Ω 5% 0402
3777	3198 031 06890	68Ω 5% 0402
3778	3198 031 04720	4.7kΩ 5% 0402
3779	3198 031 06890	68Ω 5% 0402
3780	3198 031 06890	68Ω 5% 0402
3781	3198 031 06890	68Ω 5% 0402
3782	4822 117 13548	1kΩ 5% 0402
3784	3198 031 06890	68Ω 5% 0402
3792	3198 031 01510	150Ω 5% 0.01W 0402
3793	4822 117 13602	2.2kΩ 5% 0.01W 0402
3794	3198 031 07590	75Ω 5% 0402
3795	3198 031 01510	150Ω 5% 0.01W 0402
3797	3198 031 04720	4.7kΩ 5% 0402
3800	3198 031 07590	75Ω 5% 0402
3801	3198 031 01510	150Ω 5% 0.01W 0402
3802	3198 031 01510	150Ω 5% 0.01W 0402
3803	3198 031 06890	68Ω 5% 0402
3804	3198 031 06890	68Ω 5% 0402
3805	4822 117 13545	100Ω 1% 0402
3811	3198 031 07590	75Ω 5% 0402
3812	3198 031 07590	75Ω 5% 0402
3814	3198 031 07590	75Ω 5% 0402
3815	3198 031 07590	75Ω 5% 0402
3817	3198 031 07590	75Ω 5% 0402
3818	3198 031 07590	75Ω 5% 0402
3820	3198 031 04720	4.7kΩ 5% 0402
3821	3198 031 03390	33Ω 1% 0402
3823	3198 031 06890	68Ω 5% 0402
3826	4822 117 13545	100Ω 1% 0402
3827	4822 117 13545	100Ω 1% 0402
3829	4822 117 13545	100Ω 1% 0402
3830	3198 031 06890	68Ω 5% 0402
3831	3198 031 06890	68Ω 5% 0402
3832	3198 031 06890	68Ω 5% 0402
3833	3198 031 06890	68Ω 5% 0402
3834	3198 031 06890	68Ω 5% 0402
3835	3198 031 06890	68Ω 5% 0402
3836	3198 031 06890	68Ω 5% 0402
3837	3198 031 06890	68Ω 5% 0402
3838	3198 031 06890	68Ω 5% 0402
3839	3198 031 06890	68Ω 5% 0402
3840	3198 031 06890	68Ω 5% 0402
3841	3198 031 06890	68Ω 5% 0402
3842	3198 031 06890	68Ω 5% 0402
3843	3198 031 06890	68Ω 5% 0402
3844	3198 031 06890	68Ω 5% 0402
3845	3198 031 06890	68Ω 5% 0402
3846	3198 031 04720	4.7kΩ 5% 0402
3853	3198 031 04730	47Ω 5% 0402
3855	3198 031 04720	4.7kΩ 5% 0402

3856	3198 031 01090	10Ω 5% 0.01W 0402
3857	3198 031 01090	10Ω 5% 0.01W 0402
3858	3198 031 01090	10Ω 5% 0.01W 0402
3859	3198 031 01090	10Ω 5% 0.01W 0402
3860	3198 031 01090	10Ω 5% 0.01W 0402
3861	3198 031 01090	10Ω 5% 0.01W 0402
3864	4822 117 13545	100Ω 1% 0402
3865	4822 117 13545	100Ω 1% 0402
3867	4822 117 13545	100Ω 1% 0402
3868	4822 117 13545	100Ω 1% 0402
3869	4822 117 13545	100Ω 1% 0402
3870	4822 117 13545	100Ω 1% 0402
3871	4822 117 13545	100Ω 1% 0402
3872	4822 117 13545	100Ω 1% 0402
3873	4822 117 13545	100Ω 1% 0402
3874	4822 117 13545	100Ω 1% 0402
3880	3198 031 04730	47Ω 5% 0402
3881	3198 031 04730	47Ω 5% 0402
3882	3198 031 04730	47Ω 5% 0402
3883	3198 031 04730	47Ω 5% 0402
3884	3198 031 04730	47Ω 5% 0402
3885	4822 117 13548	1kΩ 5% 0402
3886	4822 117 13548	1kΩ 5% 0402
3887	4822 117 13548	1kΩ 5% 0402
3888	4822 117 13548	1kΩ 5% 0402
3889	4822 117 13548	1kΩ 5% 0402
3890	4822 117 13548	1kΩ 5% 0402
3891	4822 117 13548	1kΩ 5% 0402
3894	3198 031 01510	150Ω 5% 0.01W 0402
3896	4822 117 13605	Jumper 0402
3900	3198 031 06890	68Ω 5% 0402
3901	3198 031 06890	68Ω 5% 0402
3902	3198 031 06890	68Ω 5% 0402
3903	4822 117 11297	100kΩ 5% 0.1W
3905	3198 031 04720	4.7kΩ 5% 0402
3909	4822 117 13545	100Ω 1% 0402
3911	2350 033 11689	4x 68Ω 5% Netw.
3912	2350 033 11689	4x 68Ω 5% Netw.
3913	2350 033 11229	4x 22Ω 5% Netw.
3914	2350 033 11229	4x 22Ω 5% Netw.
3915	2350 033 11229	4x 22Ω 5% Netw.
3916	2350 033 11229	4x 22Ω 5% Netw.
3917	2350 033 11229	4x 22Ω 5% Netw.
3918	3198 031 06890	68Ω 5% 0402
3919	3198 031 06890	68Ω 5% 0402
3921	3198 031 06890	68Ω 5% 0402
3922	4822 117 13596	220Ω 5% 0.01W 0402
3923	3198 031 06810	680Ω 5% 0.01W 0402
3924	4822 117 13596	220Ω 5% 0.01W 0402
3927	4822 117 13596	220Ω 5% 0.01W 0402
3928	3198 031 06810	680Ω 5% 0.01W 0402
3929	4822 117 13596	220Ω 5% 0.01W 0402
3930	4822 117 13596	220Ω 5% 0.01W 0402
3931	4822 117 13596	220Ω 5% 0.01W 0402
3932	3198 031 06810	680Ω 5% 0.01W 0402
3999	4822 051 30102	1kΩ 5% 0.062W
3A00	4822 117 13601	22kΩ 5% 0402
3A01	4822 117 13606	10kΩ 5% 0.01W 0402
3A02	3198 031 04730	47Ω 5% 0402
3A03▲	4822 117 13568	6.8Ω 5% 1206
3A04	4822 117 13601	22kΩ 5% 0402
3A05	4822 117 13601	22kΩ 5% 0402
3A06	4822 117 11297	100kΩ 5% 0.1W
3A07	4822 117 11297	100kΩ 5% 0.1W
3A09	4822 117 13601	22kΩ 5% 0402
3A11	4822 117 11297	100kΩ 5% 0.1W
3A12	3198 031 04730	47Ω 5% 0402
3A13	3198 031 04730	47Ω 5% 0402
3A14	3198 031 04730	47Ω 5% 0402
3A15	4822 117 11297	100kΩ 5% 0.1W
3A16	4822 117 13545	100Ω 1% 0402
3A17	4822 117 13545	100Ω 1% 0402
3A18	3198 031 06830	68kΩ 5% 0.01W 0402
3A19	4822 117 13545	100Ω 1% 0402
3A20	4822 117 11297	100kΩ 5% 0.1W
3A21	3198 031 06830	68kΩ 5% 0.01W 0402
3A22	4822 117 11297	100kΩ 5% 0.1W
3A23	3198 031 06830	68kΩ 5% 0.01W 0402
3A24	3198 031 06810	680Ω 5% 0.01W 0402
3A26	3198 031 06830	68kΩ 5% 0.01W 0402
3A27	3198 031 06820	6.8kΩ 5% 0.01W 0402
3A28	3198 031 06820	6.8kΩ 5% 0.01W 0402
3A40	3198 031 01830	18kΩ 5% 0.01W 0402
3A45	3198 031 04730	47Ω 5% 0402
3A46	3198 031 01530	15kΩ 5% 0.01W 0402
3A47	3198 031 04730	47Ω 5% 0402
3A49	3198 031 01830	18kΩ 5% 0.01W 0402
3A51	3198 031 01530	15kΩ 5% 0.01W 0402
3A52	3198 031 05630	56kΩ 5% 0402
3A53	3198 031 05630	56kΩ 5% 0402
3A55	4822 117 13597	330Ω 5% 0402 0.01W
3A60	4822 117 11297	100kΩ 5% 0.1W
3A61	4822 117 13597	330Ω 5% 0402 0.01W
3A63	4822 117 13601	22kΩ 5% 0402
3A64	3198 031 04730	47Ω 5% 0402
3A65	4822 117 11297	100kΩ 5% 0.1W
3A66	4822 117 11297	100kΩ 5% 0.1W
3A67	4822 117 13543	470Ω 5% 0402
3C00	4822 117 13602	2.2kΩ 5% 0.01W 0402
3C01	3198 031 01090	10Ω 5% 0.01W 0402
3C03	4822 117 13606	10kΩ 5% 0.01W 0402
3C04	4822 117 13606	10kΩ 5% 0.01W 0402
3C05	4822 117 13543	470Ω 5% 0402
3C08	4822 051 30103	10kΩ 5% 0.062W
3C10	4822 117 13545	100Ω 1% 0402
3C11	4822 117 13545	100Ω 1% 0402
3C12	3198 031 06890	68Ω 5% 0402
3E00	4822 117 13606	10kΩ 5% 0.01W 0402
3E01	4822 117 13548	1kΩ 5% 0402
3E02	4822 117 13548	1kΩ 5% 0402
3E03	4822 117 13548	1kΩ 5% 0402
3E04	4822 117 13548	1kΩ 5% 0402
3E05	3198 031 01520	1.2kΩ 5% 0.01W 0402
3E06	4822 117 13545	100Ω 1% 0402
3E07	4822 117 13545	100Ω 1% 0402
3E08	4822 117 13545	100Ω 1% 0402
3E11	4822 117 13543	470Ω 5% 0402
3E12	4822 117 13543	470Ω 5% 0402
3E14	4822 117 13548	1kΩ 5% 0402
3E16	3198 031 02720	2.7kΩ 5% 0.01W 0402
3E18	4822 117 13545	100Ω 1% 0402
3E19	4822 117 13545	100Ω 1% 0402
3E37	4822 117 13545	100Ω 1% 0402
3E50	4822 117 13606	10kΩ 5% 0.01W 0402
3E51	4822 117 13606	10kΩ 5% 0.01W 0402
3E52	4822 117 13606	10kΩ 5% 0.01W 0402
3E53	4822 117 13606	10kΩ 5% 0.01W 0402
3E54	4822 117 13546	47Ω 5% 0402
3E55	4822 117 13606	10kΩ 5% 0.01W 0402
3E56	4822 117 13603	33kΩ 5% 0402
3E57	4822 117 11297	100kΩ 5% 0.1W
3E58	4822 117 13546	47Ω 5% 0402
3E59	4822 117 13606	10kΩ 5% 0.01W 0402
3E61	4822 117 13546	47Ω 5% 0402
3E62	4822 117 13548	1kΩ 5% 0402
3E63	4822 117 13606	10kΩ 5% 0.01W 0402
3E64	4822 117 13606	10kΩ 5% 0.01W 0402
3E69	3198 031 04720	4.7kΩ 5% 0402
3E70	3198 031 04720	4.7kΩ 5% 0402
3E73	4822 117 13606	10kΩ 5% 0.01W 0402
3E74	4822 117 13546	47Ω 5% 0402
3E77	4822 117 13546	47Ω 5% 0402
3E78	4822 117 13546	47Ω 5% 0402
3E79	4822 117 13546	47Ω 5% 0402
3E80	4822 117 13546	47Ω 5% 0402
3E81	4822 117 13546	47Ω 5% 0402
3E82	3198 031 01090	10Ω 5% 0.01W 0402
3E83	3198 031 01090	10Ω 5% 0.01W 0402
3E84	3198 031 01090	10Ω 5% 0.01W 0402
3E85	3198 031 01090	10Ω 5% 0.01W 0402
3E86	3198 031 01090	10Ω 5% 0.01W 0402
3E88	4822 117 13546	47Ω 5% 0402
3E89	4822 117 13546	47Ω 5% 0402
3E90	3198 031 06890	68Ω 5% 0402
3E91	3198 031 03390	33Ω 1% 0402
3I07	4822 117 13606	10kΩ 5% 0.01W 0402
3I08	4822 117 13597	330Ω 5% 0402 0.01W
3I28	4822 117 13545	100Ω 1% 0402
3I29	4822 051 30759	75Ω 5% 0.062W
3I30	4822 051 30759	75Ω 5% 0.062W
3I31	4822 051 30759	75Ω 5% 0.062W
3I32	4822 117 13548	1kΩ 5% 0402
3I33	4822 051 30101	100Ω 5% 0.062W
3I34	4822 117 13606	10kΩ 5% 0.01W 0402
3I35	4822 051 30101	100Ω 5% 0.062W
3I36	4822 117 13601	22kΩ 5% 0402
3I37	4822 117 13601	22kΩ 5% 0402
3I38	4822 117 13601	22kΩ 5% 0402
3I40	4822 051 30101	100Ω 5% 0.062W
3I41	4822 117 13548	1kΩ 5% 0402
3I42	4822 117 13548	1kΩ 5% 0402
3I44	4822 117 13606	10kΩ 5% 0.01W 0402
3I45	3198 031 04730	47Ω 5% 0402
3I46	4822 117 13545	100Ω 1% 0402
3I47	4822 117 13602	2.2kΩ 5% 0.01W 0402
3I49	4822 117 13545	100Ω 1% 0402
3I50	4822 051 30271	270Ω 5% 0.062W
3I51	4822 051 30101	100Ω 5% 0.062W
3I52	4822 051 30271	270Ω 5% 0.062W
3I53	4822 051 30101	100Ω 5% 0.062W
3I54	4822 051 30101	100Ω 5% 0.062W
3I55	4822 051 30759	75Ω 5% 0.062W
3I56	4822 051 30101	100Ω 5% 0.062W
3I57	4822 051 30759	75Ω 5% 0.062W
3I58	4822 051 30101	100Ω 5% 0.062W
3I59	4822 051 30759	75Ω 5% 0.062W
3I60	4822 051 30759	75Ω 5% 0.062W
3I61	4822 051 30101	100Ω 5% 0.062W
3I62	4822 051 30101	100Ω 5% 0.062W
3I63	4822 051 30392	3.9Ω 5% 0.063W 0603
3I64	3198 031 08220	8.2kΩ 5% 0.5W
3I65	4822 051 30101	100Ω 5% 0.062W
3I66	4822 051 30759	75Ω 5% 0.062W
3I67	4822 051 30759	75Ω 5% 0.062W
3I68	4822 051 30101	100Ω 5% 0.062W
3I69	4822 051 30271	270Ω 5% 0.062W
3I70	4822 051 30101	100Ω 5% 0.062W
3I71	4822 051 30271	270Ω 5% 0.062W
3I72	4822 051 30101	100Ω 5% 0.062W
3I75	4822 051 30101	100Ω 5% 0.062W
3I76	4822 051 30101	100Ω 5% 0.062W
3I77	4822 051 30759	75Ω 5% 0.062W
3I78	4822 051 30759	75Ω 5% 0.062W
3I79	4822 051 30101	100Ω 5% 0.062W
3I80	4822 051 30101	100Ω 5% 0.062W
3I81	3198 031 08220	8.2kΩ 5% 0.5W
3I82	4822 051 30392	3.9Ω 5% 0.063W 0603
3I83	4822 051 30101	100Ω 5% 0.062W
3I84	4822 051 30759	75Ω 5% 0.062W
3I86	4822 051 30759	75Ω 5% 0.062W
3I87	4822 051 30101	100Ω 5% 0.062W
3I88	4822 051 30759	75Ω 5% 0.062W
3I89	4822 051 30271	270Ω 5% 0.062W
3I90	4822 051 30101	100Ω 5% 0.062W
3I91	4822 051 30271	270Ω 5% 0.062W
3I92	4822 051 30101	100Ω 5% 0.062W
3I98	4822 117 13605	Jumper 0402
3I99	4822 051 30271	270Ω 5% 0.062W
3IA0	4822 051 30101	100Ω 5% 0.062W
3IA2	4822 051 30101	100Ω 5% 0.062W
3IA3	4822 117 13601	22kΩ 5% 0402
3IA4	4822 117 13548	1kΩ 5% 0402
3IA5	4822 117 13548	1kΩ 5% 0402
3IA6	4822 117 13548	1kΩ 5% 0402
3IA7	4822 117 13548	1kΩ 5% 0402
3IA8	4822 117 13548	1kΩ 5% 0402
3IB2	4822 117 13545	100Ω 1% 0402
3IB4	4822 117 13601	22kΩ 5% 0402
3IB5	4822 117 13601	22kΩ 5% 0402
3IC1▲	4822 117 13574	1.5Ω 5% 1206
3IC2	4822 117 13601	22kΩ 5% 0402
3IC3	4822 117 13601	22kΩ 5% 0402
3IC4	4822 117 13545	100Ω 1% 0402
3IC6	4822 117 13545	100Ω 1% 0402
3IC9	4822 117 13601	22kΩ 5% 0402
3ID0	3198 031 04720	4.7kΩ 5% 0402
3ID1	3198 031 01540	150kΩ 5% 0402
3ID5	3198 031 01090	10Ω 5% 0.01W 0402
3ID7	4822 117 11297	100kΩ 5% 0.1W
3ID8	4822 117 11297	100kΩ 5% 0.1W
3IE2	4822 117 13545	100Ω 1% 0402
3IE3	4822 117 13545	100Ω 1% 0402
3IE7	3198 031 01090	10Ω 5% 0.01W 0402
3IE9	4822 117 13601	22kΩ 5% 0402
3IF0	4822 117 13545	100Ω 1% 0402
3IF5	4822 117 13601	22kΩ 5% 0402
3IF6	4822 051 30101	100Ω 5% 0.062W
3IF7	4822 051 30101	100Ω 5% 0.062W
3IG1	3198 031 01090	10Ω 5% 0.01W 0402
3IG4	3198 031 01090	10Ω 5% 0.01W 0402
3IG7	3198 031 01090	10Ω 5% 0.01W 0402
3IH1	3198 031 04730	47Ω 5% 0402
3IH8	3198 031 04730	47Ω 5% 0402
3IH9	3198 031 04730	47Ω 5% 0402
3IHA	4822 117 13545	100Ω 1% 0402
3IHB	4822 117 13545	100Ω 1% 0402
3IHC	4822 117 13545	100Ω 1% 0402
3IHG	3198 021 31820	1.8kΩ 5% 0.062W 06O3
3II0	4822 117 13606	10kΩ 5% 0.01W 0402
3II1	4822 117 13601	22kΩ 5% 0402
3II2	4822 117 13601	22kΩ 5% 0402
3II3	3198 031 04730	47Ω 5% 0402
3II4	3198 031 04730	47Ω 5% 0402
3II6	4822 117 13601	22kΩ 5% 0402
3II7	4822 117 13601	22kΩ 5% 0402
3II9	4822 117 13548	1kΩ 5% 0402
3IJ8	4822 117 13548	1kΩ 5% 0402
3IK0	4822 117 13548	1kΩ 5% 0402
3IK2	4822 117 13601	22kΩ 5% 0402
3IK3	4822 117 13601	22kΩ 5% 0402
3IK7▲	4822 117 11152	4.7Ω 5%
3IN1	4822 117 13548	1kΩ 5% 0402
3IN4▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IN5	4822 117 13601	22kΩ 5% 0402
3IN6	4822 117 13601	22kΩ 5% 0402
3IN8	3198 031 01090	10Ω 5% 0.01W 0402
3IO5	4822 117 13606	10kΩ 5% 0.01W 0402
3IO6	4822 117 13606	10kΩ 5% 0.01W 0402
3IP0	3198 031 08220	8.2kΩ 5% 0.5W
3IP1	4822 117 13602	2.2kΩ 5% 0.01W 0402
3IP2	4822 117 13596	220Ω 5% 0.01W 0402
3IP3	4822 051 30759	75Ω 5% 0.062W

3IP4	3198 031 02710	270Ω 5% 0.1W 0402
3IP5▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IP6	4822 117 13548	1kΩ 5% 0402
3IP7	3198 031 02720	2.7kΩ 5% 0.01W 0402
3IP8	4822 117 13548	1kΩ 5% 0402
3IQ0	3198 031 01090	10Ω 5% 0.01W 0402
3IQ5	3198 031 04730	47Ω 5% 0402
3IQ6	4822 117 13545	100Ω 1% 0402
3IQ7	4822 117 13545	100Ω 1% 0402
3IQ8	3198 031 03320	3.3kΩ 5% 0402
3IQ9	4822 117 13548	1kΩ 5% 0402
3IR1	3198 031 02710	270Ω 5% 0.1W 0402
3IR2	3198 031 04720	4.7kΩ 5% 0402
3IR3	3198 031 04720	4.7kΩ 5% 0402
3IR4	4822 117 13545	100Ω 1% 0402
3IR5	4822 117 13546	47Ω 5% 0402
3IR6	4822 117 13546	47Ω 5% 0402
3IR7	4822 117 13543	470Ω 5% 0402
3IR8	3198 031 03320	3.3kΩ 5% 0402
3IR9	2322 706 71201	120Ω 1% 0402
3IS0	2322 706 71201	120Ω 1% 0402
3IS1	2322 706 71201	120Ω 1% 0402
3IS2	4822 117 13545	100Ω 1% 0402
3IS5	2322 706 71201	120Ω 1% 0402
3IT0	3198 031 04730	47Ω 5% 0402
3IT1	3198 031 04730	47Ω 5% 0402
3IT4	3198 031 04730	47Ω 5% 0402
3IT5	2322 706 71201	120Ω 1% 0402
3IT6	2322 706 71201	120Ω 1% 0402
3IT7	4822 117 13548	1kΩ 5% 0402
3IT8	4822 117 13548	1kΩ 5% 0402
3IT9	4822 117 13597	330Ω 5% 0402 0.01W
3IU0▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IV0	3198 031 08220	8.2kΩ 5% 0.5W
3IV1	4822 117 13548	1kΩ 5% 0402
3IV2	4822 117 13543	470Ω 5% 0402
3IV3	4822 117 13548	1kΩ 5% 0402
3IW4	3198 031 06820	6.8kΩ 5% 0.01W 0402
3IW5	3198 031 02720	2.7kΩ 5% 0.01W 0402
3L03	4822 117 13545	100Ω 1% 0402
3L04	4822 117 13545	100Ω 1% 0402
3L05	4822 117 13545	100Ω 1% 0402
3L06	4822 117 13545	100Ω 1% 0402
3L08	3198 031 02720	2.7kΩ 5% 0.01W 0402
3L11	4822 117 13545	100Ω 1% 0402
3L12	4822 117 13543	470Ω 5% 0402
3L28	4822 117 13543	470Ω 5% 0402
3L29	3198 031 01510	150Ω 5% 0.01W 0402
3L30	3198 031 01510	150Ω 5% 0.01W 0402
3L31	3198 031 01510	150Ω 5% 0.01W 0402
3L32	4822 117 13543	470Ω 5% 0402
3L33	4822 117 13543	470Ω 5% 0402
3L41	3198 031 04720	4.7kΩ 5% 0402
3L42	3198 031 04730	47Ω 5% 0402
3L43	4822 117 13606	10kΩ 5% 0.01W 0402
3L44	4822 117 13605	Jumper 0402
3P65	4822 117 13545	100Ω 1% 0402
3P66	4822 117 13545	100Ω 1% 0402
3P67	3198 031 04720	4.7kΩ 5% 0402
3P69	3198 031 04720	4.7kΩ 5% 0402
3P70	3198 031 04720	4.7kΩ 5% 0402
3P72	3198 031 04720	4.7kΩ 5% 0402
3T10	4822 117 13606	10kΩ 5% 0.01W 0402
3T11	4822 117 13606	10kΩ 5% 0.01W 0402
3T12	4822 117 13548	1kΩ 5% 0402
3T13	4822 117 13606	10kΩ 5% 0.01W 0402
3T14	3198 031 04730	47Ω 5% 0402
3T15	4822 117 13606	10kΩ 5% 0.01W 0402
3T16	4822 117 11297	100kΩ 5% 0.1W
3T17	4822 117 13606	10kΩ 5% 0.01W 0402
3T18	3198 031 02720	2.7kΩ 5% 0.01W 0402
3T19	4822 117 13596	220Ω 5% 0.01W 0402
3T20	2322 706 71002	1kΩ 1% 0402
3T22	3198 031 04720	4.7kΩ 5% 0402
3T23	4822 117 13548	1kΩ 5% 0402
3T24	2322 706 73902	3.9kΩ 1% 0402
3T25	3198 031 06820	6.8kΩ 5% 0.01W 0402
3T26	4822 117 13613	2.2Ω 5% 0603
3T27	4822 051 30109	10Ω 5% 0.062W
3T28	4822 051 30109	10Ω 5% 0.062W
3T29	4822 117 13606	10kΩ 5% 0.01W 0402
3T30	4822 117 13606	10kΩ 5% 0.01W 0402
3T31	4822 117 13545	100Ω 1% 0402
3T32	4822 117 13548	1kΩ 5% 0402
3T33▲	5322 117 11726	10Ω 5%
3T51	4822 117 13548	1kΩ 5% 0402
3T52	4822 117 13606	10kΩ 5% 0.01W 0402
3T54	4822 117 13606	10kΩ 5% 0.01W 0402
3T55	4822 117 13606	10kΩ 5% 0.01W 0402
3T56	4822 117 13606	10kΩ 5% 0.01W 0402
3T57	4822 051 30101	100Ω 5% 0.062W
3T58	3198 031 04730	47Ω 5% 0402
3T59	4822 117 13606	10kΩ 5% 0.01W 0402
3T60	4822 117 13608	4.7Ω 5% 0603 0.62W

3U01	4822 051 30102	1kΩ 5% 0.062W
3U02	4822 117 13548	1kΩ 5% 0402
3U03	4822 117 13603	33kΩ 5% 0402
3U04	4822 051 20121	120Ω 5% 0.1W
3U05	4822 117 13548	1kΩ 5% 0402
3U06	4822 117 13543	470Ω 5% 0402
3U07	3198 031 02290	22Ω 5% 0.1W 0402
3U08	2322 706 71502	1.5kΩ 1% 0402
3U09	3198 031 05620	5.6kΩ 5% 0.01W 0402
3U10	4822 117 13596	220Ω 5% 0.01W 0402
3U11	4822 051 30121	120Ω 5% 0.062W
3U12	4822 117 13601	22kΩ 5% 0402
3U13	4822 117 13606	10kΩ 5% 0.01W 0402
3U14	4822 051 30102	1kΩ 5% 0.062W
3U15	2322 706 73302	3.3kΩ 1% 0402
3U17	3198 031 04780	4.7Ω 5% 0402
3U18	2322 706 71002	1kΩ 1% 0402
3U19	3198 031 04720	4.7kΩ 5% 0402
3U20	2322 706 71002	1kΩ 1% 0402
3U21	3198 031 04730	47Ω 5% 0402
3U22	3198 031 02710	270Ω 5% 0.1W 0402
3U23	3198 031 01090	10Ω 5% 0.01W 0402
3U24	4822 117 13601	22kΩ 5% 0402
3U25	3198 031 02240	220kΩ 5% 0.1W 0402
3U26	4822 117 13601	22kΩ 5% 0402
3U27	4822 117 13601	22kΩ 5% 0402
3U28	3198 031 04730	47Ω 5% 0402
3U29	4822 051 30109	10Ω 5% 0.062W
3U30	4822 051 20121	120Ω 5% 0.1W
3U31	4822 051 20121	120Ω 5% 0.1W
3U32	3198 031 01830	18kΩ 5% 0.01W 0402
3U33	4822 117 13606	10kΩ 5% 0.01W 0402
3U35	4822 117 13606	10kΩ 5% 0.01W 0402
3U36	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U37	4822 117 13601	22kΩ 5% 0402
3U38	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U39	4822 117 13601	22kΩ 5% 0402
3U40	3198 031 01540	150kΩ 5% 0402
3U41	4822 117 13548	1kΩ 5% 0402
3U42	4822 117 13606	10kΩ 5% 0.01W 0402
3U43	4822 117 13601	22kΩ 5% 0402
3U44	3198 031 01050	1MΩ 5% 0402
3U45	3198 031 01050	1MΩ 5% 0402
3U46	2322 706 74703	47kΩ 1% 0402
3U51	9965 000 23109	22Ω 5% 0603
3U52	4822 051 30102	1kΩ 5% 0.062W
3U53	3198 031 01830	18kΩ 5% 0.01W 0402
3U54	4822 117 13545	100Ω 1% 0402
3U55	4822 051 30102	1kΩ 5% 0.062W
3U56	3198 031 04720	4.7kΩ 5% 0402
3U57	4822 117 13606	10kΩ 5% 0.01W 0402
3U60	4822 117 13548	1kΩ 5% 0402
3U61	4822 117 13606	10kΩ 5% 0.01W 0402
3U62	4822 117 13548	1kΩ 5% 0402
3U63	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U64	4822 117 13548	1kΩ 5% 0402
3U65	4822 117 13548	1kΩ 5% 0402
3U66	4822 117 13606	10kΩ 5% 0.01W 0402
3U67	4822 117 13545	100Ω 1% 0402
3U68	4822 117 13606	10kΩ 5% 0.01W 0402
3U69	4822 117 13548	1kΩ 5% 0402
3U70	4822 051 30102	1kΩ 5% 0.062W
3V01	3198 031 01810	180Ω 5% 0402
3V02	3198 031 01810	180Ω 5% 0402
3V17	3198 031 01810	180Ω 5% 0402
3V19	3198 031 01810	180Ω 5% 0402
3V20	3198 031 01810	180Ω 5% 0402
3V21	2350 033 11689	4x 68Ω 5% Netw.
3V22	2350 033 11689	4x 68Ω 5% Netw.
3V23	2350 033 11689	4x 68Ω 5% Netw.
3V24	2350 033 11689	4x 68Ω 5% Netw.
3V25	3198 031 01810	180Ω 5% 0402
3V26	3198 031 01810	180Ω 5% 0402
3V27	3198 031 01810	180Ω 5% 0402
3V28	3198 031 01810	180Ω 5% 0402
3V29	3198 031 01810	180Ω 5% 0402
3V30	3198 031 01810	180Ω 5% 0402
3V31	3198 031 01810	180Ω 5% 0402
3V32	3198 031 01810	180Ω 5% 0402
3V33	3198 031 01810	180Ω 5% 0402
3V34	3198 031 01810	180Ω 5% 0402
3V35	4822 117 13545	100Ω 1% 0402
3V36	4822 117 13545	100Ω 1% 0402
3V37	4822 117 13545	100Ω 1% 0402
3V38	4822 117 13545	100Ω 1% 0402
3V39	3198 031 04720	4.7kΩ 5% 0402
3V40	4822 117 13545	100Ω 1% 0402
3V50	4822 117 13606	10kΩ 5% 0.01W 0402
3V51	4822 117 13606	10kΩ 5% 0.01W 0402
3V52	4822 117 13602	2.2kΩ 5% 0.01W 0402
3V53	4822 117 13602	2.2kΩ 5% 0.01W 0402
3V54	4822 117 13606	10kΩ 5% 0.01W 0402
3V55	4822 117 13606	10kΩ 5% 0.01W 0402
3V56	4822 117 13545	100Ω 1% 0402

3Y00	4822 117 13545	100Ω 1% 0402
3Y02	4822 117 13545	100Ω 1% 0402
3Y04	4822 117 13602	2.2kΩ 5% 0.01W 0402
3Y05	4822 117 13545	100Ω 1% 0402
3Y06	4822 117 13543	470Ω 5% 0402
3Y07▲	4822 117 11151	1Ω 5%
3Y09	4822 117 13545	100Ω 1% 0402
3Y10	4822 117 13545	100Ω 1% 0402
3Y11	4822 117 13545	100Ω 1% 0402
3Y12	4822 117 13545	100Ω 1% 0402
3Y13	4822 117 13543	470Ω 5% 0402
3Y14	3198 031 04720	4.7kΩ 5% 0402
3Y15	4822 117 13606	10kΩ 5% 0.01W 0402
3Y16	3198 031 04720	4.7kΩ 5% 0402
3Y17	4822 117 13545	100Ω 1% 0402
3Y19	4822 117 13545	100Ω 1% 0402
3Y20	3198 031 06890	68Ω 5% 0402
3Y21	3198 031 06890	68Ω 5% 0402
3Y22	3198 031 06890	68Ω 5% 0402
3Y23	3198 031 06890	68Ω 5% 0402
3Y24	4822 117 11297	100kΩ 5% 0.1W
3Y25	4822 117 13545	100Ω 1% 0402
3Y34	4822 117 13545	100Ω 1% 0402
3Y35	4822 117 13545	100Ω 1% 0402
3Y36	4822 117 13545	100Ω 1% 0402
3Y37	3198 031 04720	4.7kΩ 5% 0402
3Y38	4822 117 13602	2.2kΩ 5% 0.01W 0402
3Y39	4822 117 13606	10kΩ 5% 0.01W 0402
3Y40	4822 117 13545	100Ω 1% 0402
3Z22	3198 031 04720	4.7kΩ 5% 0402
3Z23	4822 117 13545	100Ω 1% 0402
3Z30	4822 117 13606	10kΩ 5% 0.01W 0402
3Z31	4822 117 13606	10kΩ 5% 0.01W 0402
3Z32	4822 117 13606	10kΩ 5% 0.01W 0402
3Z33	4822 117 13606	10kΩ 5% 0.01W 0402
3Z37	3198 031 04720	4.7kΩ 5% 0402
3Z56	4822 117 13548	1kΩ 5% 0402
9001	4822 117 13605	Jumper 0402
9002	4822 117 13605	Jumper 0402
9007	4822 117 13605	Jumper 0402
9010	4822 117 13605	Jumper 0402
9011▲	4822 117 13605	Jumper 0402
9012	4822 117 13605	Jumper 0402
9013	4822 117 13605	Jumper 0402
9023	4822 117 13605	Jumper 0402
9024	4822 117 13605	Jumper 0402
9322	4822 117 13605	Jumper 0402
9410	4822 117 13605	Jumper 0402
9413	4822 117 13605	Jumper 0402
9416	4822 117 13605	Jumper 0402
9417	4822 117 13605	Jumper 0402
9418	4822 117 13605	Jumper 0402
9419	4822 117 13605	Jumper 0402
9420	4822 117 13605	Jumper 0402
9423	4822 117 13605	Jumper 0402
9424	4822 117 13605	Jumper 0402
9425	4822 117 13605	Jumper 0402
9426	4822 117 13605	Jumper 0402
9427	4822 117 13545	100Ω 1% 0402
9428	4822 117 13605	Jumper 0402
9502	4822 051 30008	Jumper 0603
9508	4822 051 30008	Jumper 0603
9509	3198 036 90010	Wire 0.58mm
9510	3198 036 90010	Wire 0.58mm
9511	3198 036 90010	Wire 0.58mm
9512	3198 036 90010	Wire 0.58mm
9513	3198 036 90010	Wire 0.58mm
9514	3198 036 90010	Wire 0.58mm
9515	3198 036 90010	Wire 0.58mm
9521	4822 051 30008	Jumper 0603
9523	3198 036 90010	Wire 0.58mm
9524	4822 051 30008	Jumper 0603
9525	3198 036 90010	Wire 0.58mm
9526	3198 036 90010	Wire 0.58mm
9702	4822 117 13605	Jumper 0402
9704	4822 117 13605	Jumper 0402
9706	4822 117 13605	Jumper 0402
9707	2238 869 15189	18pF 5% 50V 0402
9708	2238 869 15189	18pF 5% 50V 0402
9709	2238 869 15189	18pF 5% 50V 0402
9710	4822 117 13605	Jumper 0402
9713	4822 117 13605	Jumper 0402
9714	4822 117 13605	Jumper 0402
9715	4822 117 13605	Jumper 0402
9716	4822 117 13605	Jumper 0402
9717	4822 117 13605	Jumper 0402
9718	4822 117 13605	Jumper 0402
9720	4822 117 13605	Jumper 0402
9721	4822 117 13605	Jumper 0402
9722	4822 117 13605	Jumper 0402
9723	4822 117 13605	Jumper 0402
9727	4822 117 13605	Jumper 0402
9728	4822 117 13605	Jumper 0402
9730	4822 117 13605	Jumper 0402

9732	4822 117 13605	Jumper 0402
9751	4822 117 13605	Jumper 0402
9752	4822 117 13605	Jumper 0402
9753	4822 117 13605	Jumper 0402
9754	4822 117 13605	Jumper 0402
9755	4822 117 13605	Jumper 0402
9756	4822 117 13605	Jumper 0402
9757	4822 117 13605	Jumper 0402
9758	4822 117 13605	Jumper 0402
9760	4822 117 13605	Jumper 0402
9761	4822 117 13605	Jumper 0402
9762	4822 117 13605	Jumper 0402
9763	4822 117 13605	Jumper 0402
9765	4822 117 13605	Jumper 0402
9766	4822 117 13605	Jumper 0402
9772	4822 117 13605	Jumper 0402
9773	4822 117 13605	Jumper 0402
9774	4822 117 13605	Jumper 0402
9775	4822 117 13605	Jumper 0402
9776	4822 117 13605	Jumper 0402
9777	4822 117 13605	Jumper 0402
9800	4822 117 13605	Jumper 0402
9801	4822 117 13605	Jumper 0402
9802	4822 117 13605	Jumper 0402
9803	4822 117 13605	Jumper 0402
9804	4822 117 13605	Jumper 0402
9805	4822 117 13605	Jumper 0402
9806	4822 117 13605	Jumper 0402
9808	4822 117 13605	Jumper 0402
9809	4822 117 13605	Jumper 0402
9811	4822 117 13605	Jumper 0402
9812	4822 117 13605	Jumper 0402
9815	4822 117 13605	Jumper 0402
9816	4822 117 13605	Jumper 0402
9817	4822 117 13605	Jumper 0402
9818	4822 117 13605	Jumper 0402
9820	4822 117 13605	Jumper 0402
9821	4822 117 13605	Jumper 0402
9822	4822 117 13605	Jumper 0402
9823	3198 031 06890	68Ω 5% 0402
9A00	4822 117 13605	Jumper 0402
9A01	4822 117 13605	Jumper 0402
9A04	4822 117 13605	Jumper 0402
9A05	4822 117 13605	Jumper 0402
9A06	4822 117 13605	Jumper 0402
9A07	4822 117 13605	Jumper 0402
9A22	4822 117 13605	Jumper 0402
9A65	4822 117 13605	Jumper 0402
9A67	4822 051 20008	Jumper 0805
9A71	4822 051 20008	Jumper 0805
9C02	4822 117 13605	Jumper 0402
9E60	4822 117 13605	Jumper 0402
9E62	4822 117 13605	Jumper 0402
9E65	4822 117 13605	Jumper 0402
9E66	4822 117 13605	Jumper 0402
9E67	4822 117 13605	Jumper 0402
9E68	4822 117 13605	Jumper 0402
9E69	4822 117 13605	Jumper 0402
9E70	4822 117 13605	Jumper 0402
9E71	4822 117 13605	Jumper 0402
9E72	4822 117 13605	Jumper 0402
9E73	4822 117 13605	Jumper 0402
9E74	4822 117 13605	Jumper 0402
9E76	4822 117 13605	Jumper 0402
9E77	4822 117 13605	Jumper 0402
9I00	4822 117 13605	Jumper 0402
9I02	4822 117 13605	Jumper 0402
9I07	4822 117 13605	Jumper 0402
9I15	4822 117 13605	Jumper 0402
9I28	4822 117 13605	Jumper 0402
9I30	4822 117 13605	Jumper 0402
9I31	4822 117 13605	Jumper 0402
9I32	4822 117 13605	Jumper 0402
9I33	4822 117 13605	Jumper 0402
9I34	4822 117 13605	Jumper 0402
9I35	4822 117 13605	Jumper 0402
9I39	4822 117 13605	Jumper 0402
9I45	4822 117 13605	Jumper 0402
9I49	4822 117 13605	Jumper 0402
9I68	4822 117 13605	Jumper 0402
9I85	4822 117 13605	Jumper 0402
9IA5	4822 117 13605	Jumper 0402
9IA7	4822 117 13605	Jumper 0402
9ID0	4822 117 13605	Jumper 0402
9ID1	4822 117 13605	Jumper 0402
9ID3	4822 117 13605	Jumper 0402
9ID5	4822 117 13605	Jumper 0402
9ID8	4822 117 13605	Jumper 0402
9ID9	4822 117 13605	Jumper 0402
9L01	4822 117 13605	Jumper 0402
9P69	4822 117 13605	Jumper 0402
9P70	4822 117 13605	Jumper 0402
9P71	4822 117 13605	Jumper 0402
9T01	4822 117 13601	22kΩ 5% 0402
9T04	4822 117 13605	Jumper 0402
9T07	4822 117 13605	Jumper 0402
9T08	4822 117 13605	Jumper 0402
9T11	4822 117 13605	Jumper 0402
9T12	4822 117 13605	Jumper 0402
9T14	4822 117 13605	Jumper 0402
9T50	4822 117 13605	Jumper 0402
9Y00	3198 031 01090	10Ω 5% 0.01W 0402
9Y01	4822 117 13605	Jumper 0402
9Y03	4822 117 13605	Jumper 0402
9Y05	4822 117 13605	Jumper 0402
9Y06	4822 117 13605	Jumper 0402
9Y12	4822 117 13605	Jumper 0402
9Y13	4822 117 13605	Jumper 0402
9Y14	4822 117 13605	Jumper 0402
9Y16	4822 117 13605	Jumper 0402

5003	2422 549 43769	Bead 30Ω at 100MHz
5401	3198 018 56880	6.8µH 10% 0603
5404	4822 157 11506	Bead 120Ω at 100MHz
5405	4822 157 11506	Bead 120Ω at 100MHz
5406	3198 018 52280	2.2µF 10% 1008
5408	2422 549 00232	Trimmer 78MHz 5JKH
5411	4822 157 11892	0.22µH 10% 0805
5416	4822 157 11716	Bead 30Ω at 100MHz
5702	4822 157 11716	Bead 30Ω at 100MHz
5703	4822 157 11716	Bead 30Ω at 100MHz
5705	4822 157 11876	6.8µH 10% 0805
5706	4822 157 11876	6.8µH 10% 0805
5707	4822 157 11876	6.8µH 10% 0805
5708	4822 157 11876	6.8µH 10% 0805
5713	4822 157 11716	Bead 30Ω at 100MHz
5714	4822 157 11716	Bead 30Ω at 100MHz
5719	4822 157 11716	Bead 30Ω at 100MHz
5720	4822 157 11716	Bead 30Ω at 100MHz
5724	4822 157 11716	Bead 30Ω at 100MHz
5725	4822 157 11716	Bead 30Ω at 100MHz
5727	4822 157 11716	Bead 30Ω at 100MHz
5750	4822 157 11716	Bead 30Ω at 100MHz
5751	4822 157 11716	Bead 30Ω at 100MHz
5752	4822 157 11716	Bead 30Ω at 100MHz
5753	4822 157 11716	Bead 30Ω at 100MHz
5756	4822 157 11716	Bead 30Ω at 100MHz
5757	4822 157 11716	Bead 30Ω at 100MHz
5758	4822 157 11716	Bead 30Ω at 100MHz
5759	4822 157 11716	Bead 30Ω at 100MHz
5760	4822 157 11716	Bead 30Ω at 100MHz
5761	4822 157 11716	Bead 30Ω at 100MHz
5762	4822 157 11716	Bead 30Ω at 100MHz
5763	4822 157 11716	Bead 30Ω at 100MHz
5764	4822 157 11716	Bead 30Ω at 100MHz
5767	4822 157 11716	Bead 30Ω at 100MHz
5768	4822 157 11716	Bead 30Ω at 100MHz
5769	4822 157 11716	Bead 30Ω at 100MHz
5770	4822 157 11716	Bead 30Ω at 100MHz
5771	4822 157 11716	Bead 30Ω at 100MHz
5772	4822 157 11716	Bead 30Ω at 100MHz
5773	4822 157 11716	Bead 30Ω at 100MHz
5775	4822 157 11716	Bead 30Ω at 100MHz
5777	4822 157 11716	Bead 30Ω at 100MHz
5778	4822 157 11876	6.8µH 10% 0805
5800	4822 157 11716	Bead 30Ω at 100MHz
5801	4822 157 11716	Bead 30Ω at 100MHz
5A00	2422 549 44197	Bead 220Ω at 100MHz
5A01	2422 549 44197	Bead 220Ω at 100MHz
5A02	2422 549 44197	Bead 220Ω at 100MHz
5A03	2422 549 44197	Bead 220Ω at 100MHz
5A06	2422 549 44197	Bead 220Ω at 100MHz
5A07	2422 549 44197	Bead 220Ω at 100MHz
5A19	4822 157 11828	22µH 20% 0805
5A38	2422 549 44197	Bead 220Ω at 100MHz
5E00	4822 156 21729	Bead 1kΩ 100MHz 0805
5E01	2422 549 42896	Bead 120Ω 100MHz
5E02	4822 156 21729	Bead 1kΩ 100MHz 0805
5E03	4822 156 21729	Bead 1kΩ 100MHz 0805
5E50	4822 157 11499	Bead 60Ω at 100MHz
5E51	2422 549 42896	Bead 120Ω 100MHz
5E52	2422 549 43062	Bead 600Ω at 100MHz
5E53	2422 536 00779	10µH 20%
5E54	4822 157 11499	Bead 60Ω at 100MHz
5E55	2422 549 43062	Bead 600Ω at 100MHz
5E58	2422 549 43062	Bead 600Ω at 100MHz
5I05	4822 157 11716	Bead 30Ω at 100MHz
5I06	4822 157 11716	Bead 30Ω at 100MHz
5I12	4822 157 11716	Bead 30Ω at 100MHz
5I13	4822 157 11716	Bead 30Ω at 100MHz
5I21	4822 157 11716	Bead 30Ω at 100MHz
5I22	4822 157 11716	Bead 30Ω at 100MHz
5I30	4822 157 11716	Bead 30Ω at 100MHz
5I31	4822 157 11716	Bead 30Ω at 100MHz
5I32	4822 157 11716	Bead 30Ω at 100MHz
5I33	4822 157 11716	Bead 30Ω at 100MHz
5I34	4822 157 11716	Bead 30Ω at 100MHz
5I35	4822 157 11716	Bead 30Ω at 100MHz
5I36	4822 157 11892	0.22µH 10% 0805
5I37	4822 157 11892	0.22µH 10% 0805
5I38	4822 157 11892	0.22µH 10% 0805
5I39	4822 157 11716	Bead 30Ω at 100MHz
5I40	4822 157 11716	Bead 30Ω at 100MHz
5I41	4822 157 11716	Bead 30Ω at 100MHz
5I42	4822 156 21729	Bead 1kΩ 100MHz 0805
5I45	4822 157 11716	Bead 30Ω at 100MHz
5I46	4822 157 11716	Bead 30Ω at 100MHz
5I47	4822 157 11716	Bead 30Ω at 100MHz
5L02	3198 018 54770	0.47µF 10% 0603
5L04	3198 018 54770	0.47µF 10% 0603
5L06	3198 018 54770	0.47µF 10% 0603
5L13	4822 156 21729	Bead 1kΩ 100MHz 0805
5L14	4822 156 21729	Bead 1kΩ 100MHz 0805
5L15	4822 156 21729	Bead 1kΩ 100MHz 0805
5L16	4822 157 11716	Bead 30Ω at 100MHz
5L17	4822 157 11716	Bead 30Ω at 100MHz
5L18	4822 157 11716	Bead 30Ω at 100MHz
5P51	4822 157 11716	Bead 30Ω at 100MHz
5T10	2422 536 00779	10µH 20%
5T11	2422 535 94995	10µF 20% 10145
5T14	2422 549 44197	Bead 220Ω at 100MHz
5T15	2422 549 44197	Bead 220Ω at 100MHz
5T20	4822 157 11716	Bead 30Ω at 100MHz
5T22	4822 157 11716	Bead 30Ω at 100MHz
5T25	2422 535 94134	10µH 20% 0805
5U01	3104 308 20661	Transf. BD13118-02
5U02	2422 536 00779	10µH 20%
5U03	2422 549 44197	Bead 220Ω at 100MHz
5U04	2422 549 44197	Bead 220Ω at 100MHz
5U05	2422 536 00779	10µH 20%
5U06	2422 536 00779	10µH 20%
5Y00	2422 549 44197	Bead 220Ω at 100MHz
5Y01	2422 549 44197	Bead 220Ω at 100MHz
5Y02	2422 549 44197	Bead 220Ω at 100MHz
5Y03	2422 549 44197	Bead 220Ω at 100MHz
5Y06	2422 549 44197	Bead 220Ω at 100MHz
5Y07	2422 549 44197	Bead 220Ω at 100MHz
5Y11	2422 549 44197	Bead 220Ω at 100MHz
5Y12	2422 549 44197	Bead 220Ω at 100MHz
5Y14	2422 549 44197	Bead 220Ω at 100MHz
5Y15	2422 549 44197	Bead 220Ω at 100MHz
5Y16	2422 549 44197	Bead 220Ω at 100MHz
5Y17	2422 549 44197	Bead 220Ω at 100MHz
5Y18	2422 549 44197	Bead 220Ω at 100MHz
5Y19	4822 157 11716	Bead 30Ω at 100MHz
5Y20	2422 549 44197	Bead 220Ω at 100MHz
5Y21	4822 117 10353	150Ω 1% 0.1W
5Y22	4822 117 10353	150Ω 1% 0.1W
5Y23	2422 549 44197	Bead 220Ω at 100MHz
5Z01	2422 549 45325	Bead 67Ω at 100MHz
5Z02	2422 549 45325	Bead 67Ω at 100MHz
5Z03	2422 549 45325	Bead 67Ω at 100MHz
5Z04	2422 549 45325	Bead 67Ω at 100MHz
5Z05	2422 549 45325	Bead 67Ω at 100MHz
5Z06	2422 549 44197	Bead 220Ω at 100MHz
5Z07	2422 549 44197	Bead 220Ω at 100MHz
5Z08	2422 549 44197	Bead 220Ω at 100MHz

6001	4822 130 80622	BAT54
6003	4822 130 80622	BAT54
6004	4822 130 80622	BAT54
6005	4822 130 11422	PLVA2650A
6006	4822 130 11564	UDZ3.9B
6403	9340 552 30115	BA591
6500	4822 130 11416	PDZ6.8B
6501	4822 130 11416	PDZ6.8B
6502	4822 130 11416	PDZ6.8B
6503	4822 130 11416	PDZ6.8B
6504	4822 130 11397	BAS316
6505	4822 130 11416	PDZ6.8B
6506	4822 130 11416	PDZ6.8B
6507	9322 129 41685	BZM55-C12
6508	4822 130 11551	UDZS10B
6701	4822 130 11397	BAS316
6702	4822 130 11397	BAS316
6703	4822 130 11397	BAS316
6705	4822 130 11397	BAS316
6710	4822 130 11397	BAS316
6711	4822 130 11397	BAS316
6712	4822 130 11397	BAS316
6713	4822 130 11397	BAS316
6714	4822 130 11397	BAS316
6715	4822 130 11397	BAS316
6716	4822 130 11397	BAS316
6717	4822 130 11397	BAS316
6718	4822 130 11397	BAS316

6719	9322 128 69685	S1D
6720	4822 130 11397	BAS316
6721	4822 130 11397	BAS316
6723	4822 130 11397	BAS316
6A00	4822 130 11551	UDZS10B
6A01	4822 130 11397	BAS316
6A02	9322 159 70685	MM3Z9V1
6E51	4822 130 11397	BAS316
6E52	4822 130 11397	BAS316
6E53	4822 130 11397	BAS316
6E54	4822 130 11397	BAS316
6E55	4822 130 11397	BAS316
6E56	4822 130 11397	BAS316
6I01	4822 130 10328	BAV99W
6I06	4822 130 10328	BAV99W
6I07	4822 130 10328	BAV99W
6I08	4822 130 11423	PLVA2656A
6I09	4822 130 11423	PLVA2656A
6I10	4822 130 11397	BAS316
6I11	4822 130 11397	BAS316
6I12	4822 130 11397	BAS316
6I13	4822 130 11397	BAS316
6I14	4822 130 10328	BAV99W
6I15	4822 130 10328	BAV99W
6I16	4822 130 10328	BAV99W
6I17	4822 130 10328	BAV99W
6I18	4822 130 10328	BAV99W
6I19	4822 130 10328	BAV99W
6I20	4822 130 10328	BAV99W
6I21	4822 130 10328	BAV99W
6I22	4822 130 11416	PDZ6.8B
6I23	4822 130 11416	PDZ6.8B
6I24	4822 130 11416	PDZ6.8B
6I25	4822 130 11416	PDZ6.8B
6I26	4822 130 11416	PDZ6.8B
6I27	4822 130 11416	PDZ6.8B
6I28	4822 130 11416	PDZ6.8B
6I29	4822 130 11416	PDZ6.8B
6I30	4822 130 11416	PDZ6.8B
6I31	4822 130 11416	PDZ6.8B
6I32	4822 130 11416	PDZ6.8B
6I33	4822 130 11416	PDZ6.8B
6I35	4822 130 11416	PDZ6.8B
6I36	4822 130 11416	PDZ6.8B
6I37	4822 130 11416	PDZ6.8B
6I38	4822 130 11416	PDZ6.8B
6I39	4822 130 11416	PDZ6.8B
6I40	4822 130 11416	PDZ6.8B
6I41	4822 130 11416	PDZ6.8B
6I42	4822 130 11416	PDZ6.8B
6I43	4822 130 11416	PDZ6.8B
6I44	4822 130 11416	PDZ6.8B
6I45	4822 130 11416	PDZ6.8B
6I46	4822 130 11416	PDZ6.8B
6I47	4822 130 11416	PDZ6.8B
6I48	4822 130 11416	PDZ6.8B
6I49	9322 129 41685	BZM55-C12
6I50	4822 130 11416	PDZ6.8B
6I51	4822 130 11416	PDZ6.8B
6I52	4822 130 11416	PDZ6.8B
6I53	4822 130 11416	PDZ6.8B
6I54	4822 130 11416	PDZ6.8B
6I55	4822 130 11416	PDZ6.8B
6I56	4822 130 11416	PDZ6.8B
6I61	4822 130 11416	PDZ6.8B
6I62	4822 130 11416	PDZ6.8B
6I63	4822 130 11397	BAS316
6I64	4822 130 11397	BAS316
6I65	4822 130 11397	BAS316
6I66	4822 130 11397	BAS316
6I68	4822 130 11416	PDZ6.8B
6I69	4822 130 11416	PDZ6.8B
6I70	4822 130 11416	PDZ6.8B
6I75	4822 130 11416	PDZ6.8B
6I77	4822 130 11416	PDZ6.8B
6I90	4822 130 11416	PDZ6.8B
6I91	4822 130 11416	PDZ6.8B
6I92	4822 130 11416	PDZ6.8B
6I93	4822 130 11416	PDZ6.8B
6I99	4822 130 11423	PLVA2656A
6IA0	9322 129 41685	BZM55-C12
6IA7	4822 130 11397	BAS316
6T01	4822 130 11397	BAS316
6T03	4822 130 11397	BAS316
6T08	9340 548 71115	PDZ33B
6T10	4822 130 11397	BAS316
6T11	9340 548 58115	PDZ9.1B
6U01	4822 130 11397	BAS316
6U03	4822 130 11397	BAS316
6U04	4822 130 11397	BAS316
6U05	9322 129 41685	BZM55-C12
6U06	9322 203 37685	BZG05C3V9
6U07	4822 130 11416	PDZ6.8B
6U08	4822 130 80622	BAT54
6U09	4822 130 80622	BAT54
6U10	4822 130 11522	UDZ15B
6U11	4822 130 11397	BAS316
6U12	9340 548 52115	PDZ5.1B
6U13	9340 548 58115	PDZ9.1B
6U14	4822 130 10328	BAV99W
6U16	9340 548 52115	PDZ5.1B
6U17	4822 130 11416	PDZ6.8B
6V06	4822 130 10328	BAV99W
6V07	4822 130 10328	BAV99W

7001	9352 684 81557	SAA5801H/015
7002	3198 010 42320	BC857BW
7003	3198 010 42310	BC847BW
7004	3198 010 42310	BC847BW
7005	9322 172 45668	LF33ABDT
7006		For SW see item 0601
7007	9322 200 55668	IS41LV16100-50K
7008	3198 010 42310	BC847BW
7009	3198 010 42310	BC847BW
7010	3198 010 42320	BC857BW
7011	9322 130 41668	M24C64-WMN6
7012	9322 199 93668	M29W400DT-55N6
7013	3198 010 42310	BC847BW
7014	3198 010 42320	BC857BW
7017	9340 310 30215	PDTC144ET
7018	9352 115 40118	74LVC245APW
7019	9352 115 40118	74LVC245APW
7020	3198 010 42310	BC847BW
7021	9340 425 30115	BC847BPN
7022	3198 010 42320	BC857BW
7320	3198 010 42310	BC847BW
7322	3198 010 42310	BC847BW
7323	9352 625 24518	TDA9321H/N2
7402	3198 010 42310	BC847BW
7403	3198 010 42310	BC847BW
7407	3198 010 42320	BC857BW
7410	3198 010 42310	BC847BW
7411	3198 010 42310	BC847BW
7414	3198 010 42310	BC847BW
7415	3198 010 42310	BC847BW
7501	3198 010 42310	BC847BW
7502	3198 010 42310	BC847BW
7515	9351 869 40118	74HC4053PW
7516	9351 869 40118	74HC4053PW
7703	3198 010 42310	BC847BW
7705	3198 010 42310	BC847BW
7706	3198 010 70400	74LVC1G14GW
7707	3198 010 42310	BC847BW
7708	3198 010 42310	BC847BW
7709	3198 010 42310	BC847BW
7710	3198 010 42310	BC847BW
7711		For SW see item 0605
7712	9352 190 20118	74LVC573APW
7713	9352 688 09557	SAA4978H/V204
7714	9965 000 02179	MS81V04160-25TB
7717	4822 209 73852	PMBT2369
7719	9322 206 19672	MSM56V16160F-7T3-FG
7720	9322 211 71702	T6TX5AFG-0001
7752	9322 204 76671	T6TU5XBG-0001
7753	9322 206 19672	MSM56V16160F-7T3-FG
7760	9352 730 86557	SAA4998H/V1
7772	9322 170 14668	LF15ABDT
7773	9322 179 78668	LF18ABDT
7774	9322 142 88668	LF25CDT
7775	3198 010 42320	BC857BW
7776	3198 010 42320	BC857BW
7777	3198 010 42320	BC857BW
7A00	4822 209 30095	LM833D
7A01	3198 010 42310	BC847BW
7A02	9322 196 03702	MSP3411G-QI-B8V3
7A03	4822 209 30095	LM833D
7A04	4822 130 60373	BC856B
7A07	9322 183 05668	TS482ID
7A08	9340 425 20115	BC847BS
7A09	4822 130 60373	BC856B
7A11	9322 199 16668	M74HC590T
7A12	9322 199 16668	M74HC590T
7A13	3198 010 42310	BC847BW
7A14	9351 869 90118	74HCT573PW
7A15	9351 869 90118	74HCT573PW
7A16	9322 208 98668	M68AF031AM70N6
7A31	9340 425 20115	BC847BS
7E01	9322 142 88668	LF25CDT
7E02		For SW see item 0602
7E03	9352 687 21165	74LVC1G126GW
7E04	9352 687 20125	74LVC1G125GW
7E05	9322 170 14668	LF15ABDT
7E10	9352 759 98118	PCA9515ADP
7E12	9340 425 20115	BC847BS
7E23	9322 181 72671	AD9883AKST-110
7E24	9322 205 36668	AD9283BRSZ-50
7E25	3198 010 42320	BC857BW
7E26	3198 010 42320	BC857BW
7E27	3198 010 42320	BC857BW
7I01	9340 425 20115	BC847BS
7I02	9340 425 20115	BC847BS
7I03	9340 425 20115	BC847BS
7I04	3198 010 42310	BC847BW
7I05	9340 425 30115	BC847BPN
7I07	4822 130 60142	BC869
7I09	3198 010 42310	BC847BW
7I12	9351 869 40118	74HC4053PW
7I18	9322 183 61682	SII907BCQ52
7I19		For SW see item 0603
7I20	9351 869 40118	74HC4053PW
7I21	9340 425 30115	BC847BPN
7I22	3198 010 42310	BC847BW
7I23	9340 425 20115	BC847BS
7I27	3198 010 42320	BC857BW
7I29	3198 010 42320	BC857BW
7I31	3198 010 42320	BC857BW
7I32	9351 869 40118	74HC4053PW
7I35	3198 010 42310	BC847BW
7I36	3198 010 42310	BC847BW
7I37	3198 010 42320	BC857BW
7I38	3198 010 42310	BC847BW
7I44	9340 425 20115	BC847BS
7I49	9340 310 30215	PDTC144ET
7I50	9340 425 30115	BC847BPN
7I51	9340 560 35235	BSH112
7I52	9340 560 35235	BSH112
7I53	9340 425 30115	BC847BPN
7I55	4822 209 16095	BA7657F
7I56	3198 010 42310	BC847BW
7I57	3198 010 42310	BC847BW
7I58	3198 010 42310	BC847BW
7I62	3198 010 42310	BC847BW
7I65	4822 209 17398	LD1117DT33
7L01	9322 181 72671	AD9883AKST-110
7L02	4822 209 17398	LD1117DT33
7P56	4822 209 17345	M62320FP
7T01	9322 160 70668	SI4936ADY
7T04	9322 182 77668	L6910
7T10	9340 425 20115	BC847BS
7T11	9340 425 30115	BC847BPN
7T12	3198 010 42310	BC847BW
7T13	9340 425 30115	BC847BPN
7U01	4822 130 60373	BC856B
7U02	4822 130 60373	BC856B
7U03	9340 563 82518	SI4410DY
7U04	9340 563 82518	SI4410DY
7U05	3198 010 42320	BC857BW
7U06	9340 425 20115	BC847BS
7U07	9340 425 30115	BC847BPN
7U08	4822 130 42804	BC817-25
7U09	4822 130 42804	BC817-25
7U10	3198 010 42310	BC847BW
7U11	3198 010 42310	BC847BW
7U12	3198 010 42310	BC847BW
7U13	9340 425 30115	BC847BPN
7V01	9322 217 35671	EP1C12F256C8N
7V03	9322 206 19672	MSM56V16160F-7T3-FG
7V04	9340 425 20115	BC847BS
7Y01	9340 310 30215	PDTC144ET
7Y02	3198 010 42320	BC857BW
7Y03	9340 310 30215	PDTC144ET
7Y04	9340 310 30215	PDTC144ET
7Z00	3198 010 42310	BC847BW

Side I/O Panel [D]

Various

0206	3104 308 12561	Side I/O bracket
1001	2422 026 05133	Connector SVHS 4p f
1002	4822 267 10975	Connector 3p
1010	4822 267 31014	Socket head phone
1016	3104 328 28881	Side I/O assy
1M36	2422 025 17179	Connector 11p m

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2003	2022 552 05679	1µF 10% 16V 0805
2004	3198 016 36810	680pF 25V 0603
2005	2020 552 94427	100pF 5% 50V
2006	3198 016 36810	680pF 25V 0603
2007	2020 552 94427	100pF 5% 50V
2008	2238 916 15641	22nF 10% 25V 0603
2009	5322 126 11583	10nF 10% 50V 0603
2010	2238 916 15641	22nF 10% 25V 0603
2011	5322 126 11583	10nF 10% 50V 0603

-WW-

3000	4822 051 30759	75Ω 5% 0.062W
3004	4822 051 30759	75Ω 5% 0.062W
3008	4822 051 30222	2.2kΩ 5% 0.062W
3009	4822 051 30102	1kΩ 5% 0.062W
3010	4822 051 30333	33kΩ 5% 0.062W
3011	4822 051 30392	3.9Ω 5% 0.063W 0603
3012	4822 051 30102	1kΩ 5% 0.062W
3013	4822 051 30333	33kΩ 5% 0.062W
3016	4822 051 30103	10kΩ 5% 0.062W
3020	4822 051 30103	10kΩ 5% 0.062W
9004	4822 051 30008	Jumper 0603
9005	4822 051 30008	Jumper 0603
9006	4822 051 30008	Jumper 0603
9007	4822 051 30008	Jumper 0603
9008	4822 051 30008	Jumper 0603
9009	4822 051 30008	Jumper 0603
9010	4822 051 30008	Jumper 0603
9011	4822 051 30008	Jumper 0603

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6000	4822 130 11416	PDZ6.8B
6001	4822 130 11416	PDZ6.8B
6002	4822 130 11416	PDZ6.8B
6003	4822 130 11416	PDZ6.8B
6004	4822 130 11416	PDZ6.8B
6005	4822 130 11416	PDZ6.8B
6006	4822 130 11416	PDZ6.8B
6007	4822 130 11416	PDZ6.8B
6008	4822 130 11416	PDZ6.8B
6009	4822 130 11416	PDZ6.8B
6010	4822 130 11416	PDZ6.8B
6011	4822 130 11416	PDZ6.8B

Top Control Assy [E]

Various

0049	3104 308 11601	Mains knob
0054	3104 308 11591	Mains knob frame
0345	2422 025 16544	Connector 6p m
1701	4822 276 13775	Switch
1702	4822 276 13775	Switch
1703	4822 276 13775	Switch
1704	4822 276 13775	Switch
1705	4822 276 13775	Switch
1710	4822 276 14007	Switch 2P 0.1A 12V
8345	3104 311 06941	Cable 6P/680/6P

-WW-

3008	4822 117 10845	620Ω 1% 0.1W
3010	4822 117 11534	1.1kΩ 1% 0.1W
3011	4822 117 11951	2kΩ 1% 0.1W
3013	4822 117 13528	200Ω 1% 0.125W 0805
3014	3198 031 03910	390Ω 1% 0402
3017	4822 051 30339	33Ω 5% 0.062W
3018	4822 051 30339	33Ω 5% 0.062W
3019	4822 051 30339	33Ω 5% 0.062W
3020	4822 051 30339	33Ω 5% 0.062W
3021	4822 051 30339	33Ω 5% 0.062W
3022	4822 051 30339	33Ω 5% 0.062W
3023	4822 051 30339	33Ω 5% 0.062W
3024	4822 051 30339	33Ω 5% 0.062W
3025	4822 051 30339	33Ω 5% 0.062W
3026	4822 051 30339	33Ω 5% 0.062W
3027	4822 051 30339	33Ω 5% 0.062W
3028	4822 051 30339	33Ω 5% 0.062W
3999	4822 117 13602	2.2kΩ 5% 0.01W 0402
9000	4822 117 13605	Jumper 0402

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6001	9322 198 19685	SML512BC2T
6002	9322 198 19685	SML512BC2T
6003	9322 198 19685	SML512BC2T
6004	9322 198 19685	SML512BC2T
6005	9322 198 19685	SML512BC2T
6006	9322 198 19685	SML512BC2T
6007	9322 198 19685	SML512BC2T
6008	9322 198 19685	SML512BC2T
6009	9322 198 19685	SML512BC2T
6010	9322 198 19685	SML512BC2T
6011	9322 198 19685	SML512BC2T
6012	9322 198 19685	SML512BC2T

SCART 3 [H]

Various

1003	2422 025 14911	Socket Euro 21p f
1M07	4822 267 10637	Connector 5p

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2500	2022 552 05679	1µF 10% 16V 0805
2501	2020 552 94427	100pF 5% 50V
2502	2022 552 05679	1µF 10% 16V 0805
2503	2020 552 94427	100pF 5% 50V
2504	2022 552 05679	1µF 10% 16V 0805
2505	2022 552 05679	1µF 10% 16V 0805
2506	2238 586 59812	100nF 20% 50V 0603
2507	5322 126 11578	1nF 10% 50V 0603
2508	2022 552 05679	1µF 10% 16V 0805
2509	2238 586 59812	100nF 20% 50V 0603
2510	4822 126 14241	330pF 0603 50V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2238 586 59812	100nF 20% 50V 0603
2515	2022 552 05679	1µF 10% 16V 0805
2516	2022 552 05679	1µF 10% 16V 0805
2517	2022 552 05679	1µF 10% 16V 0805

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3500	4822 051 30101	100Ω 5% 0.062W
3501	4822 051 30101	100Ω 5% 0.062W
3502	4822 051 30223	22kΩ 5% 0.062W
3503	4822 051 30101	100Ω 5% 0.062W
3504	4822 051 30101	100Ω 5% 0.062W
3505	4822 051 30223	22kΩ 5% 0.062W
3506	4822 051 30759	75Ω 5% 0.062W
3507	4822 051 30759	75Ω 5% 0.062W
3508	4822 051 30759	75Ω 5% 0.062W
3509	4822 051 30101	100Ω 5% 0.062W
3510	4822 051 30759	75Ω 5% 0.062W
3511	4822 051 30479	47Ω 5% 0.062W
3512	4822 051 30479	47Ω 5% 0.062W
3513	4822 051 30479	47Ω 5% 0.062W
3514	4822 051 30479	47Ω 5% 0.062W
3515	4822 051 30479	47Ω 5% 0.062W
3516	4822 051 30479	47Ω 5% 0.062W
3517	4822 117 12925	47kΩ 1% 0.063W 0603
3522	4822 051 30272	2.7kΩ 5% 0.062W
3523	4822 051 30223	22kΩ 5% 0.062W
3524	4822 051 30479	47Ω 5% 0.062W
3525	4822 051 30102	1kΩ 5% 0.062W
3526	5322 117 13056	8.2kΩ 1% 0.063W 0603
3527	4822 051 30683	68kΩ 5% 0.062W
3528	4822 051 30223	22kΩ 5% 0.062W
3529	4822 051 30102	1kΩ 5% 0.062W
3535	4822 051 30479	47Ω 5% 0.062W
3536	4822 051 30103	10kΩ 5% 0.062W
3543	4822 051 30759	75Ω 5% 0.062W
3599	4822 051 30102	1kΩ 5% 0.062W
3999	4822 051 30102	1kΩ 5% 0.062W
9502	4822 051 30008	Jumper 0603
9508	4822 051 30008	Jumper 0603
9509	3198 036 90010	Wire 0.58mm
9510	3198 036 90010	Wire 0.58mm
9511	3198 036 90010	Wire 0.58mm
9512	3198 036 90010	Wire 0.58mm
9513	3198 036 90010	Wire 0.58mm
9514	3198 036 90010	Wire 0.58mm
9515	3198 036 90010	Wire 0.58mm
9521	4822 051 30008	Jumper 0603
9523	3198 036 90010	Wire 0.58mm
9524	4822 051 30008	Jumper 0603
9525	3198 036 90010	Wire 0.58mm
9526	3198 036 90010	Wire 0.58mm

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6500	4822 130 11416	PDZ6.8B
6501	4822 130 11416	PDZ6.8B
6502	4822 130 11416	PDZ6.8B
6503	4822 130 11416	PDZ6.8B
6504	4822 130 11397	BAS316
6505	4822 130 11416	PDZ6.8B
6506	4822 130 11416	PDZ6.8B
6507	9340 548 61115	PDZ12B
6508	4822 130 11551	UDZS10B

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7501	3198 010 42310	BC847BW
7502	3198 010 42310	BC847BW
7515	9351 869 40118	74HC4053PW
7516	9351 869 40118	74HC4053PW

LED Panel [J]

Various

0163	3122 124 36081	Day light filter
0345	2422 025 16961	Connector 6p m SMD
0345	2422 025 18741	Connector 6p m
1040	9322 206 81667	TSOP34836YA1
1M01	2422 025 17103	Connector 3p m SMD
1M01	2422 025 18738	Connector 3p m
1M20	2422 025 17441	Connector 12p m
1M20	2422 025 18736	Connector 12p m

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2030	4822 124 23002	10µF 16V
2040	4822 124 12095	100µF 20% 16V
2060	5322 124 41945	22µF 20% 35V
2070	4822 126 14583	470nF 10% 16V 0805
2071	4822 124 23002	10µF 16V

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3011	4822 117 13545	100Ω 1% 0402
3020	4822 117 13606	10kΩ 5% 0.01W 0402
3030	3198 031 04720	4.7kΩ 5% 0402
3031	4822 117 11297	100kΩ 5% 0.1W
3031	4822 117 12889	270kΩ 1% 0.063W 0603
3031	4822 117 13632	100kΩ 1% 0603 0.62W
3032	2322 705 70184	180Ω 5% 0402
3033	4822 051 30102	1kΩ 5% 0.062W
3033	4822 117 13548	1kΩ 5% 0402
3034	4822 117 13548	1kΩ 5% 0402
3035	3198 031 04720	4.7kΩ 5% 0402
3036	3198 031 02280	2.2Ω 5% 0.1W 0402
3037	3198 031 02280	2.2Ω 5% 0.1W 0402
3040	4822 117 13597	330Ω 5% 0402 0.01W
3041	4822 117 13606	10kΩ 5% 0.01W 0402
3042	3198 031 06820	6.8kΩ 5% 0.01W 0402
3051	4822 117 13597	330Ω 5% 0402 0.01W
3060	4822 117 13606	10kΩ 5% 0.01W 0402
3061	4822 051 30331	330Ω 5% 0.062W
3062	4822 117 11373	100Ω 1% 0805
3063	4822 117 13606	10kΩ 5% 0.01W 0402
3064	4822 117 11373	100Ω 1% 0805
3070	2322 705 70475	4.7MΩ 5% 0402
3071	2322 705 70475	4.7MΩ 5% 0402
3072	4822 117 13548	1kΩ 5% 0402
3073	3198 031 03320	3.3kΩ 5% 0402
3074	4822 117 13606	10kΩ 5% 0.01W 0402
3075	3198 031 04720	4.7kΩ 5% 0402
3076	3198 031 03320	3.3kΩ 5% 0402
3077	3198 031 03320	3.3kΩ 5% 0402
3078	3198 031 03320	3.3kΩ 5% 0402
3079	3198 031 03320	3.3kΩ 5% 0402
3091	4822 117 13606	10kΩ 5% 0.01W 0402
3093	4822 117 13606	10kΩ 5% 0.01W 0402
3096	4822 117 13606	10kΩ 5% 0.01W 0402
3999	3198 031 04720	4.7kΩ 5% 0402
9010	4822 117 13605	Jumper 0402
9012	4822 117 13605	Jumper 0402
9013	4822 117 13605	Jumper 0402
9014	4822 117 13605	Jumper 0402
9015	4822 117 13605	Jumper 0402
9016	4822 117 13605	Jumper 0402
9017	4822 117 13605	Jumper 0402
9019	4822 117 13605	Jumper 0402
9022	4822 051 30008	Jumper 0603
9024	4822 051 30008	Jumper 0603
9026	4822 117 13605	Jumper 0402
9027	4822 117 13605	Jumper 0402
9040	4822 117 13605	Jumper 0402
9041	4822 117 13605	Jumper 0402
9042	4822 117 13605	Jumper 0402
9043	4822 117 13605	Jumper 0402
9044	4822 117 13605	Jumper 0402
9050	4822 117 13605	Jumper 0402
9060	4822 117 13605	Jumper 0402
9081	4822 117 13605	Jumper 0402
9082	4822 117 13605	Jumper 0402

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6030	4822 130 11397	BAS316
6031	4822 130 11397	BAS316
6051	4822 130 11395	TLMH3100
6051	4822 130 83915	TLMV3100
6060	9322 208 45685	SML512BC4TL
6061	4822 130 11397	BAS316
6070	9322 140 63685	TEMD5000

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7030	3198 010 42320	BC857BW
7031	5322 130 62804	BCP53
7032	3198 010 42310	BC847BW
7060	3198 010 42310	BC847BW
7061	3198 010 42310	BC847BW
7070	9322 192 63668	LM358P

LCD Standby / Audio [SA]

Various

1304	2422 025 10647	Connector 4p m
1305	4822 267 10735	Connector 3p
1306▲	2422 025 16374	Connector 2p m
1307	2422 025 10647	Connector 4p m
1309	2422 025 11143	Connector 3p m
1314	2422 025 10771	Connector 10p m
1315	2422 025 10771	Connector 10p m
1316	2422 025 10772	Connector 12p m
1317	2422 025 10772	Connector 12p m
1318	2422 025 08149	Connector 6p m
1735	4822 267 10918	Connector 3p
1736	2422 025 10768	Connector 3p m
1739	2422 025 10769	Connector 9p m
1D40	4822 267 10637	Connector 5p
1D42	4822 267 10637	Connector 5p
1K49	2422 025 18884	Connector 4p m
1M02	2422 025 11244	Connector 7p m
1M03	2422 025 10771	Connector 10p m
1M10	2422 025 09406	Connector 4p m
1M46	2422 025 10655	Connector 11p m
1M49	2422 025 18884	Connector 4p m
1M63	2422 025 09405	Connector 2p m

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2101	4822 121 51598	2.2nF 5% 400V
2102	4822 124 40207	100µF 20% 25V
2103	2020 552 94427	100pF 5% 50V
2105	2020 552 94427	100pF 5% 50V
2109	4822 126 14583	470nF 10% 16V 0805
2110	2022 552 05679	1µF 10% 16V 0805
2111	4822 121 43526	47nF 5% 250V
2112	5322 126 11583	10nF 10% 50V 0603
2123	2238 586 59812	100nF 20% 50V 0603
2124	4822 124 40248	10µF 20% 63V
2129	5322 126 11578	1nF 10% 50V 0603
2131	2238 586 15641	22nF 10% 50V 0603
2132	4822 124 40207	100µF 20% 25V
2140	4822 124 40248	10µF 20% 63V
2141	4822 126 14583	470nF 10% 16V 0805
2144	2022 552 05679	1µF 10% 16V 0805
2145	4822 126 13881	470pF 5% 50V
2149	4822 126 14583	470nF 10% 16V 0805
2150	4822 124 12379	220µF 25V
2152	4822 121 70162	10nF 5% 400V
2153	5322 126 11582	6.8nF 10% 63V
2154	3198 017 31530	15nF 20% 50V 0603
2160	4822 124 21913	1µF 20% 63V
2163	4822 124 40207	100µF 20% 25V
2506▲	2252 811 95017	470pF 10% 250V
2507	4822 126 13682	100pF 5% 1kV
2508	4822 124 40764	22µF 100V
2510	2020 021 91668	2200µF 20% 10V
2511	4822 124 12379	220µF 25V
2512	4822 124 80061	1000µF 20% 25V
2513	2222 930 56627	2.2nF 10% 200V 0805
2515	4822 126 14238	2.2nF 50V 0603
2533	4822 124 40207	100µF 20% 25V
2534	2022 552 05679	1µF 10% 16V 0805
2535	5322 126 11583	10nF 10% 50V 0603
2536	5322 126 11583	10nF 10% 50V 0603
2537	4822 126 14238	2.2nF 50V 0603
2538	5322 126 11583	10nF 10% 50V 0603
2539	2022 552 05679	1µF 10% 16V 0805
2540	5322 126 11583	10nF 10% 50V 0603
2544	5322 126 11583	10nF 10% 50V 0603
2702	5322 126 11578	1nF 10% 50V 0603
2704	5322 126 11578	1nF 10% 50V 0603
2705	2020 552 96684	470nF 10% 25V 0805
2706	2222 580 15649	100nF 10% 50V 0805
2707	4822 126 14585	100nF 10% 0805 50V
2708	2020 552 96326	220nF 10% 16V
2709	4822 126 13881	470pF 5% 50V
2710	4822 126 13881	470pF 5% 50V
2711	5322 126 11578	1nF 10% 50V 0603
2712	2020 552 96683	220nF 10% 50V
2713	2020 552 96684	470nF 10% 25V 0805
2714	3198 017 33330	33nF 20% 16V 0603
2715	5322 126 11578	1nF 10% 50V 0603
2716	4822 126 14241	330pF 0603 50V
2717	5322 121 42498	680nF 5% 63V
2718	4822 122 33761	22pF 5% 50V
2719	5322 126 11578	1nF 10% 50V 0603
2720	2020 552 96326	220nF 10% 16V
2721	4822 126 13881	470pF 5% 50V
2722	4822 126 13881	470pF 5% 50V
2725	2020 552 94427	100pF 5% 50V
2726	3198 017 33330	33nF 20% 16V 0603
2727	5322 126 11578	1nF 10% 50V 0603
2728	4822 126 14241	330pF 0603 50V
2729	5322 121 42498	680nF 5% 63V
2764	4822 126 14491	2.2µF 10V 0805
2766	4822 126 14491	2.2µF 10V 0805
2768	4822 124 40255	100µF 20% 63V
2769	4822 124 40255	100µF 20% 63V
2777	2020 552 96683	220nF 10% 50V
2778	4822 124 40769	4.7µF 20% 100V
2779	2020 552 96683	220nF 10% 50V
2780	2020 552 96683	220nF 10% 50V
2781	2020 552 96683	220nF 10% 50V
2783	4822 124 41751	47µF 20% 50V
2786	2238 586 15641	22nF 10% 50V 0603
2788	4822 124 40255	100µF 20% 63V
2789	2020 552 96683	220nF 10% 50V
2790	4822 124 40255	100µF 20% 63V

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3100	4822 051 30101	100Ω 5% 0.062W
3101	4822 053 20475	4.7MΩ 5% 0.25W
3102	2312 915 11002	1kΩ 1% 0.5W
3103	2312 915 11002	1kΩ 1% 0.5W
3104	9965 000 23109	22Ω 5% 0603
3105	4822 051 30221	220Ω 5% 0.062W
3106	4822 051 30391	390Ω 5% 0.062W
3107	4822 051 30391	390Ω 5% 0.062W
3108	4822 053 10478	4.7Ω 5% 1W
3109	4822 051 30391	390Ω 5% 0.062W
3110	4822 051 30391	390Ω 5% 0.062W
3111	4822 053 10152	1.5kΩ 5% 1W
3112	4822 051 30391	390Ω 5% 0.062W
3113	9965 000 23109	22Ω 5% 0603
3114	4822 051 30221	220Ω 5% 0.062W
3117	4822 051 30479	47Ω 5% 0.062W
3122	4822 051 30471	47Ω 5% 0.062W
3123	4822 051 30109	10Ω 5% 0.062W
3124	4822 051 30339	33Ω 5% 0.062W
3125	4822 117 12971	15Ω 5% 0603 0.62W
3126	4822 051 30103	10kΩ 5% 0.062W
3127	4822 051 30562	5.6kΩ 5% 0.063W 0603
3128	4822 117 13608	4.7Ω 5% 0603 0.62W
3132	4822 051 30333	33kΩ 5% 0.062W
3134	4822 051 30102	1kΩ 5% 0.062W
3135	4822 051 30331	330Ω 5% 0.062W
3138	4822 051 30105	1MΩ 5% 0.062W
3140	4822 051 30223	22kΩ 5% 0.062W
3141	4822 051 30471	47Ω 5% 0.062W
3145	4822 051 30472	4.7Ω 5% 0.062W
3146	4822 051 30479	47Ω 5% 0.062W
3147	4822 051 30223	22kΩ 5% 0.062W
3148	4822 051 30479	47Ω 5% 0.062W
3149	4822 051 30103	10kΩ 5% 0.062W
3150	4822 051 30101	100Ω 5% 0.062W
3152	4822 051 30102	1kΩ 5% 0.062W
3153	4822 051 30223	22kΩ 5% 0.062W
3155	4822 050 21003	10kΩ 1% 0.6W
3156	4822 051 30102	1kΩ 5% 0.062W
3157	4822 051 30223	22kΩ 5% 0.062W
3158	4822 051 30479	47Ω 5% 0.062W
3159	4822 051 30479	47Ω 5% 0.062W
3160	4822 051 30102	1kΩ 5% 0.062W
3161	4822 051 30123	12kΩ 5% 0.1W
3171	4822 051 30101	100Ω 5% 0.062W
3172	4822 051 30333	33kΩ 5% 0.062W
3175	4822 051 30103	10kΩ 5% 0.062W
3176	4822 051 30103	10kΩ 5% 0.062W
3190	4822 053 10122	1.2kΩ 5% 1W
3191	4822 053 10122	1.2kΩ 5% 1W
3192	4822 053 10122	1.2kΩ 5% 1W
3509	4822 053 10222	2.2kΩ 5% 1W
3511	4822 051 30683	68kΩ 5% 0.062W
3512	4822 051 30471	47Ω 5% 0.062W
3513	4822 051 30333	33kΩ 5% 0.062W
3515	4822 117 13632	100kΩ 1% 0603 0.62W
3516	4822 051 30472	4.7Ω 5% 0.062W
3517	4822 051 30223	22kΩ 5% 0.062W
3528	4822 051 30472	4.7Ω 5% 0.062W
3529	4822 051 30101	100Ω 5% 0.062W
3531	4822 051 30153	15kΩ 5% 0.062W
3532	4822 051 30472	4.7Ω 5% 0.062W
3533	4822 051 30152	1.5Ω 5% 0.062W
3534	4822 051 30103	10kΩ 5% 0.062W
3538	4822 051 30101	100Ω 5% 0.062W
3539	4822 051 30471	47Ω 5% 0.062W
3540	4822 051 30222	2.2kΩ 5% 0.062W
3541	4822 051 30222	2.2kΩ 5% 0.062W
3542	4822 051 30103	10kΩ 5% 0.062W
3543	4822 051 30223	22kΩ 5% 0.062W
3544	4822 051 30221	220Ω 5% 0.062W
3560	4822 051 30682	6.8Ω 5% 0.062W
3561	4822 051 30392	3.9Ω 5% 0.063W 0603
3562	4822 117 13608	4.7Ω 5% 0603 0.62W
3701	4822 051 30103	10kΩ 5% 0.062W
3702	4822 051 30682	6.8Ω 5% 0.062W
3703	4822 051 30333	33kΩ 5% 0.062W
3704	4822 117 10833	10kΩ 1% 0.1W
3705	4822 051 20828	8.2Ω 5% 0.1W
3706	4822 051 30472	4.7Ω 5% 0.062W
3707	4822 051 30683	68kΩ 5% 0.062W
3708	4822 051 30563	56kΩ 5% 0.062W
3709	4822 117 11503	220Ω 1% 0.1W
3710	4822 051 30223	22kΩ 5% 0.062W
3711	4822 050 21204	120kΩ 1% 0.6W
3712	4822 051 30103	10kΩ 5% 0.062W
3713	2312 915 11202	1.2kΩ 1% 0.5W
3714	4822 117 12925	47kΩ 1% 0.063W 0603
3715	4822 117 12925	47kΩ 1% 0.063W 0603
3716	4822 117 12925	47kΩ 1% 0.063W 0603
3717	4822 117 13632	100kΩ 1% 0603 0.62W
3718	4822 117 13632	100kΩ 1% 0603 0.62W
3721	4822 051 30472	4.7Ω 5% 0.062W
3722	4822 051 30683	68kΩ 5% 0.062W
3723	4822 051 30563	56kΩ 5% 0.062W
3724	4822 117 11503	220Ω 1% 0.1W
3725	4822 051 30223	22kΩ 5% 0.062W
3726	4822 117 11503	220Ω 1% 0.1W
3727	4822 117 11503	220Ω 1% 0.1W
3743	4822 117 11449	2.2kΩ 5% 0.1W 0805
3746	4822 051 30223	22kΩ 5% 0.062W
3747	4822 050 21004	100kΩ 1% 0.6W
3748	4822 051 30471	47Ω 5% 0.062W
3750	4822 117 11449	2.2kΩ 5% 0.1W 0805
3756	4822 117 11449	2.2kΩ 5% 0.1W 0805
3757	4822 117 11449	2.2kΩ 5% 0.1W 0805
3759	4822 051 30332	3.3Ω 5% 0.062W
3760	4822 051 30332	3.3Ω 5% 0.062W
3761	4822 051 20109	10Ω 5% 0.1W
3762	4822 051 30222	2.2kΩ 5% 0.062W
3763	4822 051 30222	2.2kΩ 5% 0.062W
3764	4822 051 20109	10Ω 5% 0.1W
3765	4822 051 30103	10kΩ 5% 0.062W
3766	4822 117 13632	100kΩ 1% 0603 0.62W
3767	4822 117 13632	100kΩ 1% 0603 0.62W
3768	4822 117 13632	100kΩ 1% 0603 0.62W
3790	4822 051 30272	2.7kΩ 5% 0.062W
3791	4822 051 30272	2.7kΩ 5% 0.062W
3792	4822 051 30183	18kΩ 5% 0.062W
3793	4822 051 30183	18kΩ 5% 0.062W
3798	4822 051 30153	15kΩ 5% 0.062W
3999	4822 051 30103	10kΩ 5% 0.062W
9041	4822 051 20008	Jumper 0805
9042	4822 051 20008	Jumper 0805
9044	4822 051 20008	Jumper 0805
9080	4822 051 20008	Jumper 0805
9081	4822 051 20008	Jumper 0805

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5102	4822 526 10704	Bead 50 Ω at 100MHz
5103	4822 526 10704	Bead 50 Ω at 100MHz
5104	4822 157 11411	Bead 80Ω at 100MHz
5105	2422 549 43769	Bead 30Ω at 100MHz
5106	4822 157 11441	22µH 5%
5108	4822 526 10704	Bead 50 Ω at 100MHz
5110	4822 157 71736	10µH 5%
5500▲	3104 308 21181	Transf. BS25320-00
5504	2422 536 00776	33µH 10%
5505	4822 157 11411	Bead 80Ω at 100MHz
5506	4822 157 11411	Bead 80Ω at 100MHz
5507	2422 536 00433	15µH 10%
5701	2422 536 00951	68µH 20% LHL10
5702	2422 536 00951	68µH 20% LHL10
5703	4822 157 11716	Bead 30Ω at 100MHz

5705	4822 157 11716	Bead 30Ω at 100MHz
5707	4822 157 11411	Bead 80Ω at 100MHz
5708	4822 157 11411	Bead 80Ω at 100MHz
5711	4822 157 11411	Bead 80Ω at 100MHz
5712	4822 157 11411	Bead 80Ω at 100MHz
5730	2422 549 00112	Line filt. 50V 3A
5731	2422 549 00112	Line filt. 50V 3A

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6103	4822 130 10871	SBYV27-200
6104	9340 548 69115	PDZ27B
6105	4822 130 11522	UDZ15B
6106	9340 548 67115	PDZ22B
6107	4822 130 11572	STPS8H100F
6108	4822 130 80622	BAT54
6114	4822 130 10871	SBYV27-200
6115	4822 130 80622	BAT54
6116	3198 020 55680	BZX384-C5V6
6120	4822 130 11397	BAS316
6121	4822 130 11397	BAS316
6122	9322 129 34685	BZM55-C3V9
6130	9322 129 41685	BZM55-C12
6132	4822 130 11416	PDZ6.8B
6133	4822 130 11397	BAS316
6134	4822 130 11397	BAS316
6140	4822 130 83755	BYW36
6142	4822 130 80622	BAT54
6144	4822 130 11397	BAS316
6147	9322 208 44685	BZG05C6V8
6148	4822 130 11397	BAS316
6149	3198 020 55680	BZX384-C5V6
6150	9340 292 50135	BZG03-C200
6151	9340 548 71115	PDZ33B
6153	9340 292 50135	BZG03-C200
6156	4822 130 11397	BAS316
6504	9340 418 70133	BYV27-600
6511	9322 129 41685	BZM55-C12
6531	4822 130 11522	UDZ15B
6532	4822 130 11397	BAS316
6540	4822 130 80622	BAT54
6562	9340 548 67115	PDZ22B
6701	4822 130 11397	BAS316
6702	4822 130 11551	UDZS10B
6703	4822 130 11551	UDZS10B

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7100	3198 010 42320	BC857BW
7101	9340 219 30115	BC817-25W
7102	9322 160 34687	FQPF3N60
7105	3198 010 42320	BC857BW
7131	9340 557 69127	PHX9NQ20T
7140	3198 010 42310	BC847BW
7150▲	9322 149 04682	TCET1102
7501▲	9322 149 04682	TCET1102
7505	3198 010 42320	BC857BW
7506	3198 010 42310	BC847BW
7507	3198 010 42310	BC847BW
7509	3198 010 42310	BC847BW
7511	9337 331 10215	BST82
7512	9340 422 80115	PMSTA42
7531	9340 436 50115	BSP030
7532	3198 010 42310	BC847BW
7560	9340 219 30115	BC817-25W
7700	9322 163 86682	TDA7490L
7701	3198 010 42310	BC847BW
7703	3198 010 42310	BC847BW
7704	3198 010 42310	BC847BW
7705	3198 010 42310	BC847BW
7706	3198 010 42320	BC857BW
7707	3198 010 42310	BC847BW
7708	3198 010 42310	BC847BW
7709	3198 010 42310	BC847BW
7710	3198 010 42310	BC847BW
7711	3198 010 42310	BC847BW